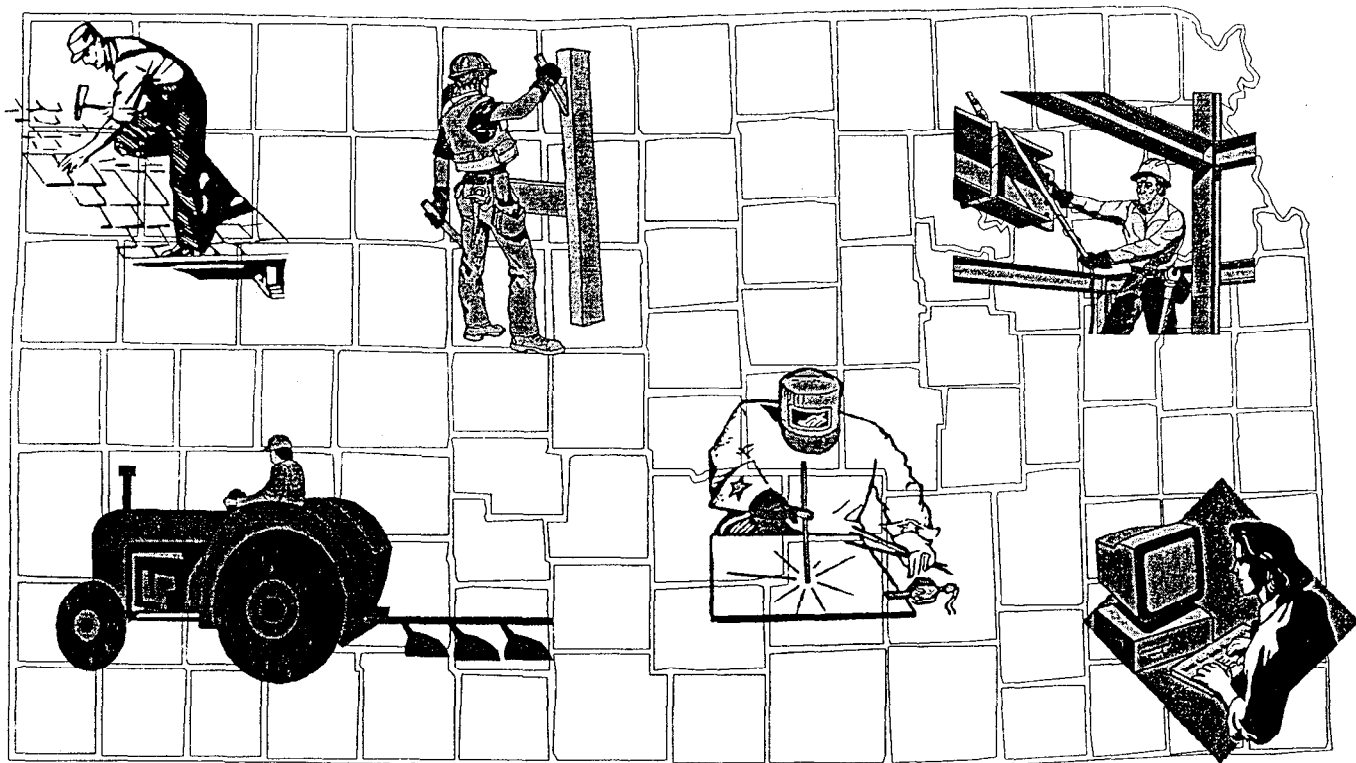


# OCCUPATIONAL INJURIES & ILLNESSES KANSAS, 1997



---

Kansas Department of Health and Environment  
Landon State Office Building, 900 SW Jackson, Topeka, Kansas 66612  
[www.kdhe.state.ks.us/ches](http://www.kdhe.state.ks.us/ches)

# **OCCUPATIONAL INJURIES & ILLNESSES KANSAS, 1997**

**Bill Graves, Governor**

**Clyde D. Graeber, Secretary**  
**Kansas Department of Health and Environment**



Prepared by  
Kansas Department of Health and Environment  
Center for Health and Environmental Statistics  
Office of Health Care Information

In cooperation with the U.S. Department of Labor  
Bureau of Labor Statistics

December, 1999

## Table of Contents

	Page
Introduction .....	1
Part I, 1997 Survey Highlights .....	3
Part II, Case Characteristics .....	27

### Part I Charts

1. Nonfatal Occupational Injury and Illness Incidence Rates by Private Industry, Kansas, 1996 and 1997 .....	5
2. Nonfatal Occupational Injury and Illness Incidence Rates by Private Industry, Kansas, 1993-1997 .....	6
3. Nonfatal Occupational Injury and Illness Incidence Rates, by Industry, Kansas and the United States, 1997 .....	7
4. Number of Nonfatal Occupational Injuries and Illnesses, Kansas, 1997 .....	8
5. Number of Nonfatal Occupational Illnesses, by Type of Illness, .....	9
6. Number of Nonfatal Occupational Illnesses in Manufacturing due to Disorders Associated With Repeated Trauma, Kansas 1997 .....	9
7. Incidence Rates for Disorders Associated with Repeated Trauma, by Industry Category, Kansas, 1997 .....	10
8. Nonfatal Occupational Injuries and Illnesses by Occurrence of Lost Workdays, Kansas, 1997 .....	11
9. Percent of Nonfatal Occupational Injuries and Illnesses by Severity, United States and Kansas, 1997 .....	12

## **Part I Tables**

1.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses, by Selected Industries and Case Types, Kansas, 1997 .....	13
2.	Number of Nonfatal Occupational Injuries and Illnesses by Selected Industries and Case Types, Kansas, 1997 .....	14
3.	Nonfatal Occupational Injury and Illness Incidence Rates per 100 Full-Time Workers by Industry Division, Kansas, 1993-1997 .....	15
4.	Nonfatal Occupational Injury and Illness Incidence Rates per 100 Full-Time Workers by Industry Division, Kansas and the United States, 1996 and 1997 .....	16
5.	Nonfatal Occupational Injury and Illness Incidence Rates per 100 Full-Time Workers, Kansas, 1976-1997 .....	17
6.	Incidence Rates of Nonfatal Occupational Injuries and Illnesses, by Industry and Selected Case Types, Kansas, 1997 .....	18
7.	Number of Nonfatal Occupational Injuries and Illnesses by Industry and Selected Case Types, Kansas, 1996 .....	20
8.	Nonfatal Occupational Illness Incidence Rates by Industry and Category of Illness, Kansas, 1997 .....	22
9.	Number of New Cases of Nonfatal Occupational Illnesses by Industry and Category of Illness, Kansas, 1997 .....	24

## **Part II Charts**

1.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Sex and Industry Division, Kansas, 1997 .....	28
2.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Length of Service, Kansas, 1997 .....	29
3.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Age-Group, Kansas, 1997 .....	30

4.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Occupational Category, Kansas, 1997 .....	31
5.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Industry Category, Kansas, 1997 .....	32
6.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Industry Division by Industry Category, Kansas, 1997 .....	32
7.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Nature of Injury or Illness, Kansas, 1997 .....	33
8.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Part of Body Affected, Kansas, 1997 .....	34
9.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Event or Exposure, Kansas, 1997 .....	34
10.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Source of Injury or Illness, Kansas, 1997 .....	35
11.	Nonfatal Occupational Injury and Illness Cases, Percent Distribution by Number of Days Away From Work, Kansas, 1997 .....	36
12.	Nonfatal Occupational Injury and Illness Cases, Median Days Away From Work by Occupational Category, Kansas, 1997 .....	36
13.	Nonfatal Occupational Injury and Illness Cases, Median Days Away From Work by Age-Group, Kansas, 1997 .....	37
14.	Nonfatal Occupational Injury and Illness Cases, Median Days Away From Work by Nature of Injury or Illness, Kansas, 1997 .....	38
15.	Nonfatal Occupational Injury and Illness Cases, Median days Away From Work by Source, Kansas, 1997 .....	39
16.	Nonfatal Occupational Injury and Illness Cases, Median Days Away From Work by Event or Exposure, Kansas, 1997 .....	40

## **Part II Tables**

1.	Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Characteristics and Industry Division, Kansas, 1997 .....	41
2.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Worker Characteristics and Industry Division, Kansas 1997 .....	42
3.	Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Occupations and Industry Division, Kansas, 1997 .....	43
4.	Number of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Injury and Illness Characteristics and Industry Division, Kansas, 1997 .....	44
5.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Injury and Illness Characteristics and Industry Division, Kansas, 1997 .....	46
6.	Incidence Rates For Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, per 10,000 Full-Time Workers for Selected Characteristics and Industry Division, Kansas, 1997 ....	48
7.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Worker Characteristics and Number of Days Away From Work, Kansas, 1997 .....	50
8.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Occupations and Number of Days Away From Work, Kansas, 1997 .....	51
9.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Selected Injury and Illness Characteristics and Number of Days Away From Work, Kansas, 1997 .....	52
10.	Percent Distribution of Nonfatal Occupational Injuries and Illnesses Involving Days Away From Work, by Industry Division and Number of Days Away From Work, Kansas, 1997 .....	54

## **Appendices**

A.	Scope of the Survey and Technical Notes .....	59
B.	Instructions for Computing Incidence Rates for an Individual Firm .....	62
C.	Glossary .....	63
D.	Report Form and Instruction .....	66
E.	Record keeping Summary .....	71

## **Introduction**

The Occupational Safety and Health Act of 1970 became an official part of the national labor law effective April 28, 1971. The act's fundamental objective is "... to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources." In order to fulfill this purpose, the Kansas Department of Health and Environment and the U.S. Department of Labor, Bureau of Labor Statistics, through a cooperative program, collect and analyze occupational injury and illness statistics in Kansas.

The 1997 survey of 3,677 private employers in Kansas serves as the basis for the estimates of occupational injuries and illnesses presented in this report. Survey results are used in measuring and evaluating the effectiveness of the Occupational Safety and Health Act in reducing work-related injuries and illnesses. Year to year comparisons of estimated incidence rates indicate basic industry trends and where prevention measures should be intensified. The rates contained in this report represent the number of injury and illness cases per 100 full-time workers and enable employers to compare the experience of their establishments to the entire industry. Further explanation of the scope of this report and the methodology used can be found in Appendix A.

Copies of this report as well as additional information may be obtained by contacting the Kansas Department of Health and Environment, Office of Health Care Information, 900 SW Jackson, Room 1002 N, Topeka, KS, 66612-1290, (785) 296-1058.

The information contained in this report may be obtained electronically by contacting the Kansas Department of Health and Environment, Center for Health and Environmental Statistics, Office of Health Care Information (785-296-5642). This report is also available on the Internet at the KDHE home page on the World Wide Web. The address is: "<http://www.ink.org/public/kdhe>". National data on occupational injuries and illnesses is available on the Internet at the Bureau of Labor Statistics' (BLS) home page. That address is: "<http://www.bls.gov>".

ADA Statement: If you desire a copy of this publication in alternative form because of a disability, contact the Kansas Department of Health and Environment, Office of Health Care Information, 900 SW Jackson, Room 1002 N, Topeka, KS, 66612-1290, (785) 296-1058.

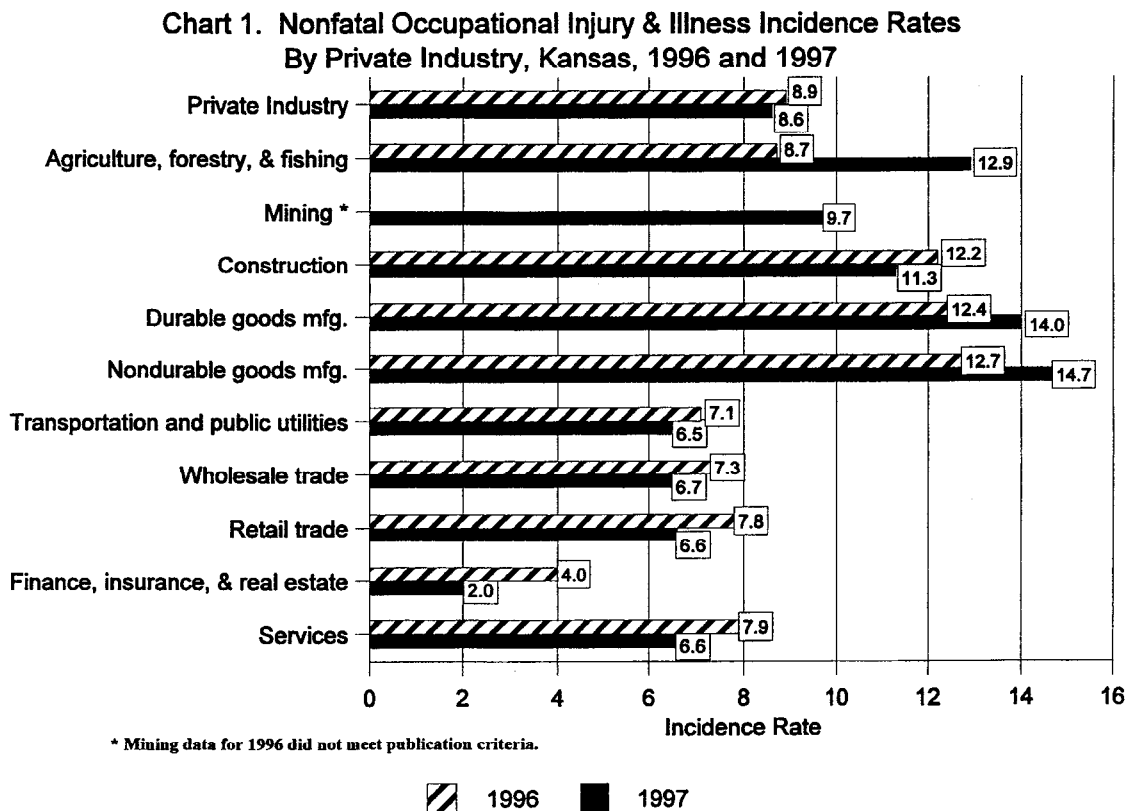


## **Part I**

### **1997 Survey Highlights**

## 1997 SURVEY HIGHLIGHTS

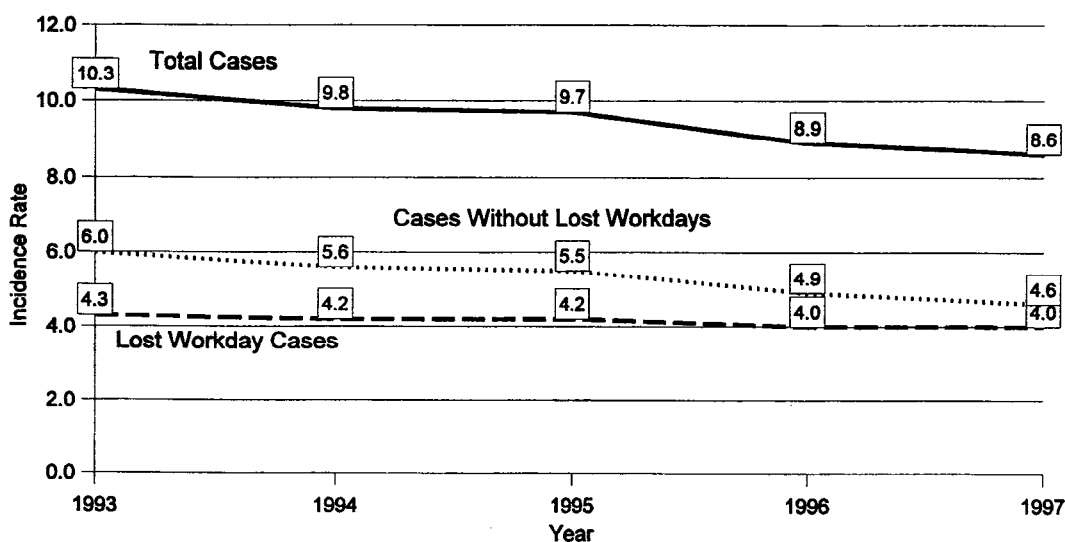
- The 1997 injury and illness incidence rate for private industry in Kansas was 8.6 per 100 full time workers, slightly lower than the rate of 8.9 reported in 1996. All but two major industry divisions reported lower rates in 1997 than in 1996. Agriculture and manufacturing, both durable and nondurable, reported higher rates in 1997. (Chart 1)
- The largest decrease in the rate of occupational injuries and illnesses occurred in the finance, insurance, & real estate industry which decreased 50% from a rate of 4.0 injuries and illnesses per 100 full-time workers in 1996 to 2.0 in 1997. (Chart 1)
- The industry with the greatest increase was agriculture, forestry & fishing which increased 48.3% from 8.7 injuries and illnesses per 100 full-time workers in 1996 to a rate of 12.9 in 1997. (Chart 1)



- When manufacturing is divided into two categories (durable and nondurable goods), they ranked first and second in highest incidence rates in 1997. Nondurable goods manufacturing, with a rate of 14.7 injuries and illnesses per 100 full-time workers was first while durable good manufacturing with a rate of 14.0 was second. (Chart 1, Table 1)

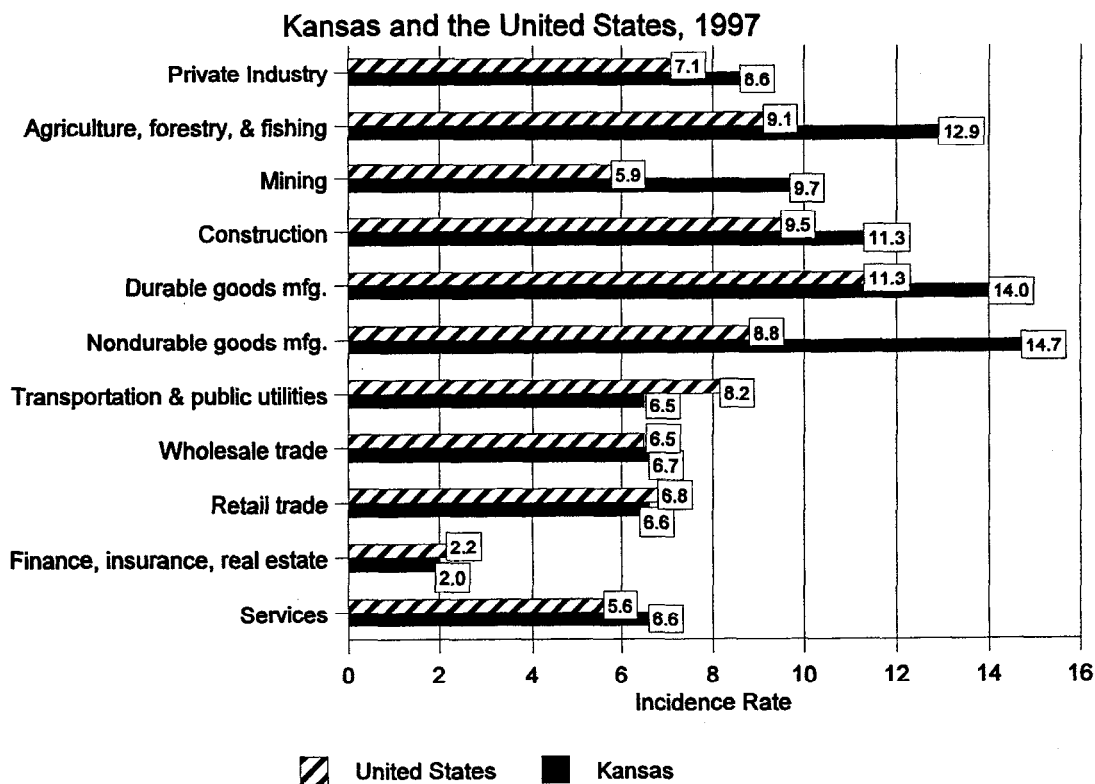
- Meat packing plants had the highest incidence rate within the nondurable goods manufacturing division, with a rate of 26.9 injuries and illnesses per 100 full-time workers. (Table 6)
- Within durable goods manufacturing, primary metal industries led all others with a rate of 20.1 injuries and illnesses per 100 full-time workers. (Table 6)
- Agriculture, forestry & fishing had the third highest rate with 12.9 injuries and illness per 100 full-time workers. In Kansas, agricultural production comprises most of this industry. Agricultural production, as a category, had a rate of 18.1 injuries and illnesses per 100 full-time workers in 1997. (Chart 1, Table 1, Table 6)
- Construction industries had the fourth highest rate with 11.3 injuries and illness per 100 full-time workers. (Chart 1, Table 1)
- Plumbing, heating & air conditioning contractors had the leading rate in the construction industry with a rate of 15.0 injuries and illness per 100 full-time workers. (Table 6)
- Wholesale trade, retail trade, and transportation & public utilities had nearly identical rates of 6.7, 6.6, and 6.5 injuries and illnesses per 100 full-time workers respectively in 1997. (Chart 1)
- As would be expected, the low risk industries of finance, insurance, and real estate had the lowest rate with 2.0 injuries and illnesses per 100 full-time workers in 1997. (Chart 1, Table 1)

**Chart 2. Nonfatal Occupational Injury and Illness Incidence Rates  
By Private Industry, Kansas, 1993 - 1997**



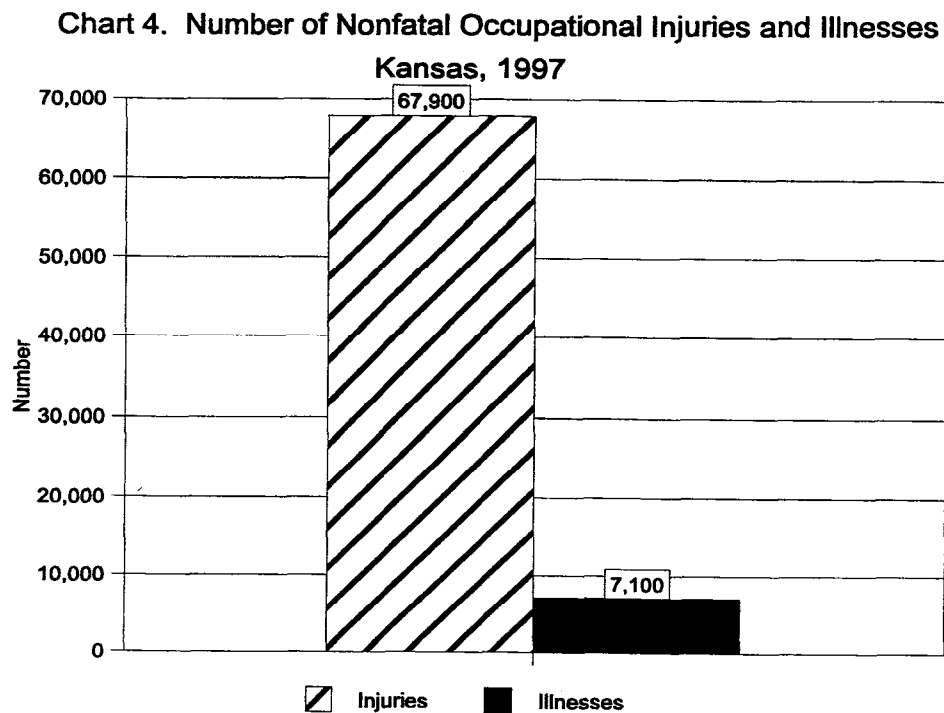
- The occupational injury and illness incidence rates per 100 full-time workers for private industry in Kansas have declined slightly each year over the past five years, ranging from 10.3 in 1993 to 8.6 in 1997. These incidence rates include all cases, both with and without lost workdays. (Chart 2, Table 3)
- The incidence rates for lost workday cases (those having days away from work and/or days of restricted work activity) have remained the most stable declining from 4.3 in 1993 to 4.0 in 1996 and 1997. (Chart 2, Table 3)
- The incidence rates for cases without lost workdays (recordable cases that did not result in days away from work or restricted work activity) have declined from 6.0 in 1993 to 4.6 in 1997. (Chart 2, Table 3)

**Chart 3. Nonfatal Occupational Injury & Illness Incidence Rates by Industry**



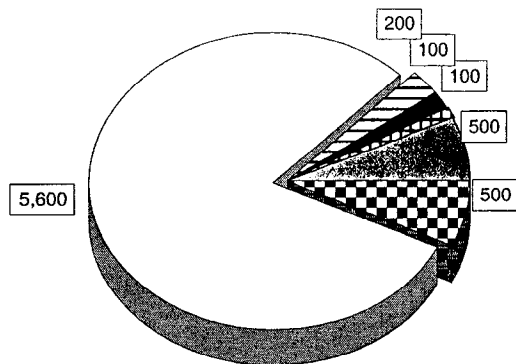
- The Kansas rate of 8.6 injuries and illness per 100 full-time workers was 21% higher than the U.S. rate of 7.1. (Chart 3, Table 4)
- Kansas had a significantly lower incidence rate than the nation in only one industry, transportation and public utilities, which was 20.7% lower. In two other industries, retail trade and finance, insurance, and real estate, Kansas had slightly lower incidence rates than the U.S. In all other industries, Kansas had a higher incidence of work-related injuries and illnesses than did the country as a whole. (Chart 3, Table 4)

- The largest discrepancy between Kansas and the U.S. was a 67% higher incidence rate in nondurable goods manufacturing of 14.7 for Kansas compared to the U.S. rate of 8.8 injuries and illnesses per 100 full-time workers. This is followed closely by the 64.4% higher rate for the mining industry with 9.7 injuries and illnesses per 100 full-time workers in Kansas compared to 5.9 in the U.S. (Chart 3, Table 4)
- Other large differences include a 41.8% higher rate in the agriculture, forestry & fishing industry of 12.9 compared to the U.S. rate of 9.1 and a 23.9% higher rate in durable goods manufacturing of 14.0 compared to 11.3 for the U.S. , and an 18.9% higher rate in the construction industry in Kansas which had a rate of 11.3 injuries and illnesses per 100 full-time workers compared to 9.5 in the U.S. (Chart 3, Table 4)



- In 1997 there were 67,900 occupational injuries and 7,100 occupational illnesses that occurred in Kansas. The number of occupational injury and illness cases ranged from 800 in the mining industry to 30,100 in manufacturing. (Chart 4, Table 2)
- Of the 7,100 occupational illness cases in 1997, 5,600 (79%) were disorders associated with repeated trauma. (Chart 5, Table 9)

Chart 5. Number of Nonfatal Occupational Illnesses  
By Type of Illness, Kansas, 1997









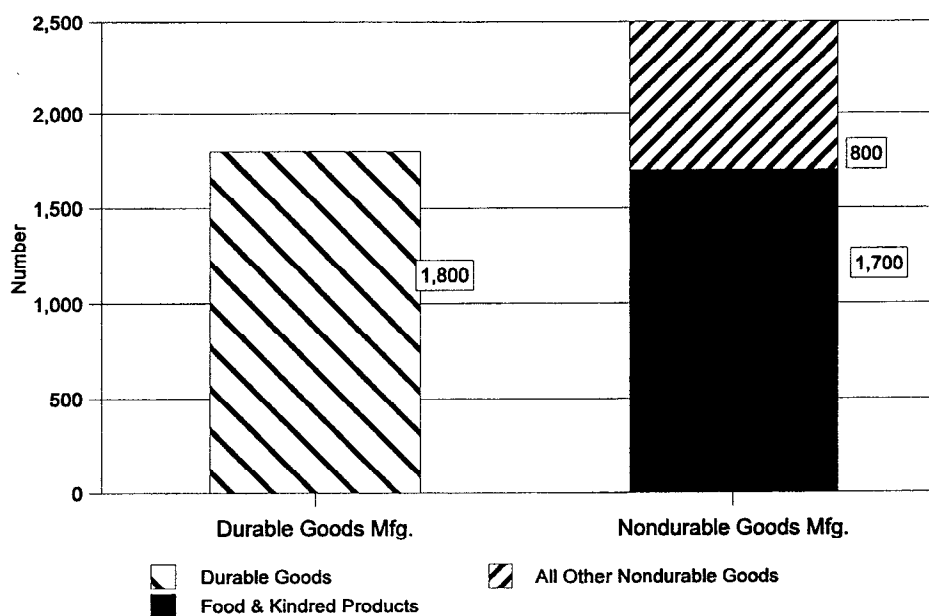
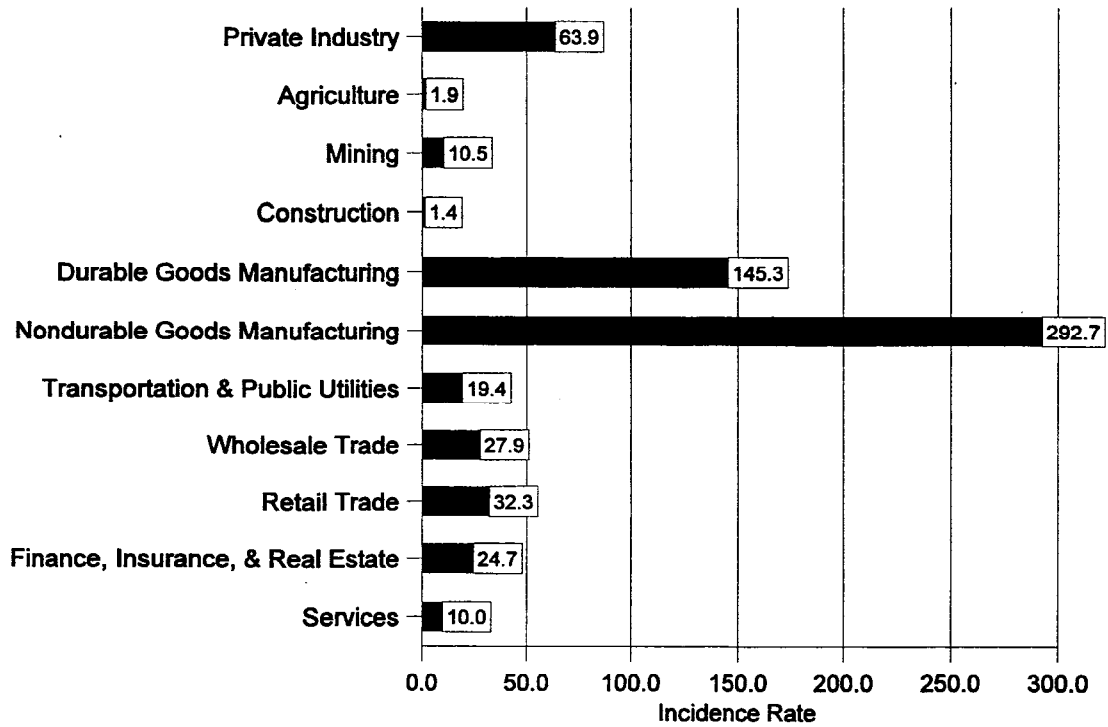
-  Skin diseases or disorders
-  Respiratory conditions due to toxic agents
-  Poisoning
-  Disorders due to physical agents
-  Disorders associated with repeated trauma
-  All other occupational illnesses

Chart 6. Number of Nonfatal Occupational Illnesses in Manufacturing  
Due to Disorders Associated With Repeated Trauma, Kansas, 1997



- Over three-fourths (77%) of the disorders associated with repeated trauma illnesses occurred in the manufacturing industry. Nondurable goods manufacturing accounted for the majority with 2,500 of these illness cases while durable goods manufacturing was responsible for 1,800 of these illness cases. (Chart 6, Table 9)

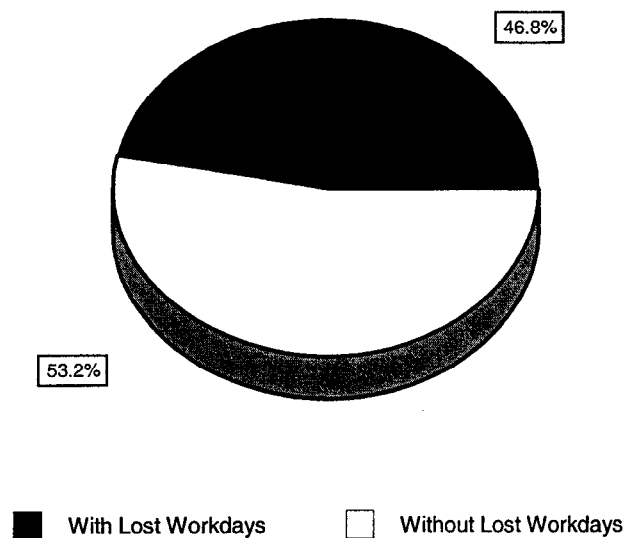
**Chart 7. Incidence Rates for Disorders Associated with Repeated Trauma by Industry Category, Kansas, 1997**



- Private industry in Kansas in 1997 had an occupational illness incidence rate of 81.1 illnesses per 10,000 workers. The illness category with the highest rate was disorders associated with repeated trauma with a rate of 63.9. Repetitive trauma includes carpal tunnel syndrome, the most common occupational illness. Repetitive motion such as grasping tools, scanning groceries, and typing are some examples of the kind of work than can result in an occupational illness associated with repeated trauma. (Chart 7)
- Manufacturing had by far the highest incidence rate of the repetitive trauma cases of all industries with a rate of 204.8 per 10,000 full-time workers. Within manufacturing, food and kindred products had by far the highest incidence rate of 504.2. The high incidence rate in this industry is due to the frequency of repetitive trauma illnesses in the meat packing industry. (Chart 7, Table 8)

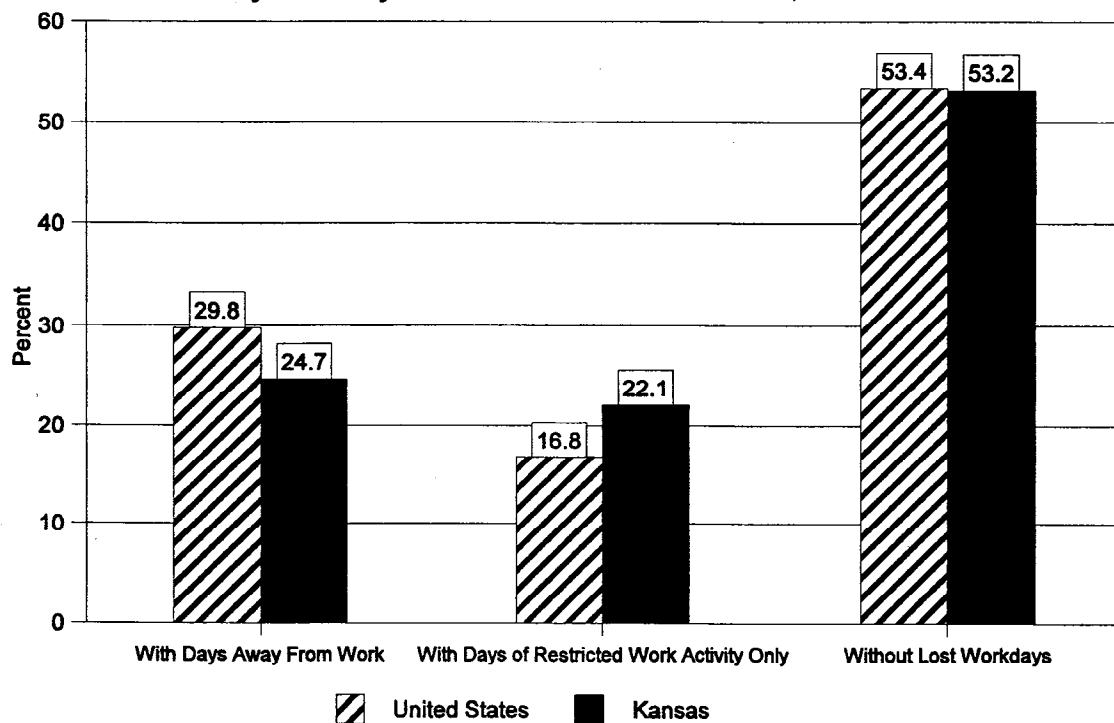
- Nearly half (46.8%) of the occupational injuries and illnesses in Kansas were serious enough to cause lost workdays in 1997. This was up slightly from 44.4% in 1996. Lost workdays includes days away from work and/or days of restricted work activity. Of the 75,000 injuries and illness cases, 18,500 (24.7%) resulted in days away from work, 16,600 (22.1%) required restrictions in work activity but no days away from work, and 39,900 (53.2%) were cases without lost workdays. (Chart 8, Chart 9, Table 2)

Chart 8. Nonfatal Occupational Injuries & Illnesses  
By Occurrence of Lost Workdays, Kansas, 1997





**Chart 9. Percent of Nonfatal Occupational Injuries & Illnesses  
by Severity, United States and Kansas, 1997**



- Kansas workers experienced a smaller percentage of injuries and illnesses resulting in days away from work than did the nation's workers as a whole and a higher percentage of injuries and illnesses requiring work restrictions. This may be due to Kansas having fewer severe injuries and illnesses than did the nation, or from employers in Kansas doing a better job accommodating workers who have suffered workplace injuries or illnesses. (Chart 9)

TABLE 1. Incidence rates<sup>1</sup> of nonfatal occupational injuries and illnesses by selected industries and case types, 1997

## Kansas

Industry <sup>2</sup>	SIC code <sup>3</sup>	1997 Annual average employment <sup>4</sup> (000's)	Injuries and illnesses				Injuries			
			Total cases	Lost workday cases		Cases without lost work-days	Total cases	Lost workday cases		Cases without lost work-days
				Total <sup>5</sup>	With days away from work <sup>6</sup>			Total <sup>5</sup>	With days away from work <sup>6</sup>	
<b>Private industry<sup>7</sup></b> .....		1,017.7	8.6	4.0	2.1	4.6	7.8	3.6	2.0	4.2
<b>Agriculture, forestry, and fishing<sup>7</sup></b> .....		14.4	12.9	6.7	5.3	6.2	12.7	6.7	5.3	6.0
<b>Mining<sup>8</sup></b> .....		8.2	9.7	6.2	4.7	3.5	9.5	6.1	4.6	3.5
<b>Construction</b> .....		59.0	11.3	5.3	4.0	6.1	11.1	5.2	3.9	5.9
General building contractors .....	15	13.0	10.6	4.4	2.9	6.2	10.5	4.3	2.9	6.2
Heavy construction, except building .....	16	10.8	11.5	5.2	3.5	6.3	11.0	5.2	3.5	5.8
Special trade contractors .....	17	35.2	11.5	5.6	4.5	5.9	11.4	5.5	4.4	5.9
<b>Manufacturing</b> .....		206.7	14.3	6.8	2.5	7.5	11.8	5.4	2.2	6.4
Durable goods .....		121.2	14.0	6.2	2.3	7.9	12.1	5.1	2.1	7.0
Primary metal industries .....	33	4.1	20.1	5.4	2.3	14.8	18.5	4.8	2.1	13.7
Industrial machinery and equipment .....	35	24.0	13.3	5.5	2.6	7.8	12.3	5.1	2.4	7.1
Electronic and other electric equipment .....	36	8.6	8.1	3.5	1.0	4.6	5.9	2.5	.8	3.4
Transportation equipment .....	37	55.2	14.6	7.1	2.0	7.5	11.9	5.4	1.7	6.6
Nondurable goods .....		85.4	14.7	7.8	2.8	6.9	11.4	5.9	2.3	5.5
Food and kindred products .....	20	32.6	20.9	12.2	3.1	8.7	15.0	8.6	2.6	6.4
Printing and publishing .....	27	23.2	6.2	3.5	1.4	2.8	5.1	2.7	1.2	2.4
Chemicals and allied products .....	28	6.5	7.0	2.4	1.5	4.6	5.8	2.0	1.4	3.8
<b>Transportation and public utilities<sup>8</sup></b> .....		65.3	6.5	3.7	2.5	2.8	6.2	3.6	2.4	2.6
<b>Wholesale and retail trade</b> .....		310.1	6.7	2.9	1.6	3.8	6.3	2.7	1.5	3.7
Wholesale trade .....		76.4	6.7	3.2	2.0	3.6	6.4	2.9	1.8	3.5
Retail trade .....		233.7	6.6	2.8	1.3	3.9	6.3	2.5	1.3	3.8
General merchandise stores .....	53	32.0	7.7	3.8	2.2	4.0	7.7	3.8	2.2	3.9
Food stores .....	54	35.1	6.0	2.4	1.3	3.6	5.9	2.4	1.3	3.5
<b>Finance, insurance, and real estate</b> .....		60.0	2.0	.8	.7	1.1	1.7	.8	.6	.9
<b>Services</b> .....		294.1	6.6	3.0	1.9	3.7	6.4	2.9	1.9	3.5
Hotels and other lodging places .....	70	10.0	7.7	2.8	1.5	4.9	7.7	2.7	1.5	4.9
Health services .....	80	102.7	9.3	4.4	3.1	4.8	9.1	4.4	3.1	4.7

<sup>1</sup> The incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as:  $(N/EH) \times 200,000$ , where

N = number of injuries and illnesses  
 EH = total hours worked by all employees during the calendar year  
 200,000 = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

<sup>2</sup> Totals include data for industries not shown separately.

<sup>3</sup> Standard Industrial Classification Manual, 1987 Edition.

<sup>4</sup> Employment is expressed as an annual average and is derived primarily from the BLS-State Covered Employment and Wages program. Employment in private households (SIC 88) is excluded.

<sup>5</sup> Total lost workday cases involve days away from work, or days of restricted work activity, or both.

<sup>6</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>7</sup> Excludes farms with fewer than 11 employees.

<sup>8</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies

TABLE 2. Number of nonfatal occupational injuries and illnesses by selected industries and case types, 1997

## Kansas

(thousands)

Industry <sup>1</sup>	SIC code <sup>2</sup>	1997 Annual average employment <sup>3</sup>	Injuries and illnesses				Injuries			
			Total cases	Lost workday cases		Cases without lost work-days	Total cases	Lost workday cases		Cases without lost work-days
				Total <sup>4</sup>	With days away from work <sup>5</sup>			Total <sup>4</sup>	With days away from work <sup>5</sup>	
<b>Private industry<sup>6</sup></b> .....		1,017.7	75.0	35.1	18.5	39.9	68.0	31.2	17.4	36.7
<b>Agriculture, forestry, and fishing<sup>6</sup></b> .....		14.4	1.4	.7	.6	.7	1.4	.7	.6	.6
<b>Mining<sup>7</sup></b> .....		8.2	.8	.5	.4	.3	.8	.5	.4	.3
<b>Construction</b> .....		59.0	6.3	2.9	2.2	3.4	6.2	2.9	2.2	3.3
General building contractors .....	15	13.0	1.2	.5	.3	.7	1.2	.5	.3	.7
Heavy construction, except building .....	16	10.8	1.3	.6	.4	.7	1.3	.6	.4	.7
Special trade contractors .....	17	35.2	3.8	1.8	1.5	1.9	3.7	1.8	1.5	1.9
<b>Manufacturing</b> .....		206.7	30.1	14.4	5.3	15.7	24.8	11.4	4.6	13.3
Durable goods .....		121.2	17.6	7.7	2.9	9.8	15.1	6.4	2.6	8.7
Primary metal industries .....	33	4.1	.8	.2	.1	.6	.8	.2	.1	.6
Industrial machinery and equipment .....	35	24.0	3.3	1.4	.6	1.9	3.1	1.3	.6	1.8
Electronic and other electric equipment .....	36	8.6	.7	.3	.1	.4	.5	.2	.1	.3
Transportation equipment .....	37	55.2	8.4	4.1	1.1	4.3	6.9	3.1	1.0	3.8
Nondurable goods .....		85.4	12.5	6.6	2.3	5.9	9.6	5.0	2.0	4.6
Food and kindred products .....	20	32.6	7.1	4.2	1.1	3.0	5.1	2.9	.9	2.2
Printing and publishing .....	27	23.2	1.3	.7	.3	.6	1.1	.6	.3	.5
Chemicals and allied products .....	28	6.5	.5	.2	.1	.3	.4	.1	.1	.3
<b>Transportation and public utilities<sup>7</sup></b> .....		65.3	4.3	2.5	1.6	1.8	4.1	2.4	1.6	1.7
<b>Wholesale and retail trade</b> .....		310.1	16.6	7.2	3.9	9.4	15.8	6.6	3.7	9.2
Wholesale trade .....		76.4	5.2	2.5	1.6	2.8	5.0	2.3	1.4	2.7
Retail trade .....		233.7	11.4	4.8	2.3	6.6	10.8	4.4	2.2	6.5
General merchandise stores .....	53	32.0	1.7	.8	.5	.9	1.7	.8	.5	.9
Food stores .....	54	35.1	1.5	.6	.3	.9	1.4	.6	.3	.9
<b>Finance, insurance, and real estate</b> .....		60.0	1.0	.4	.3	.6	.9	.4	.3	.5
<b>Services</b> .....		294.1	14.5	6.5	4.2	8.0	14.0	6.3	4.1	7.8
Hotels and other lodging places .....	70	10.0	.5	.2	.1	.3	.5	.2	.1	.3
Health services .....	80	102.7	7.6	3.6	2.6	4.0	7.5	3.6	2.6	3.9

<sup>1</sup> Totals include data for industries not shown separately.<sup>2</sup> Standard Industrial Classification Manual, 1987 Edition.<sup>3</sup> Employment is expressed as an annual average and is derived primarily from the BLS-State Covered Employment and Wages program. Employment in private households (SIC 88) is excluded.<sup>4</sup> Total lost workday cases involve days away from work, or days of restricted work activity, or both.<sup>5</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.<sup>6</sup> Excludes farms with fewer than 11 employees.<sup>7</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and

nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to totals.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies

**Table 3**  
**Nonfatal Occupational Injury and Illness Incidence Rates per 100 Full-Time Workers, 1/ by Industry Division**  
**Kansas, 1993-1997**

Industry division	Total Cases					Lost workday cases										Cases without lost workdays				
						Total 2/					With days away from work 3/									
	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997	1993	1994	1995	1996	1997
Private industry 4/ .....	10.3	9.8	9.7	8.9	8.6	4.3	4.2	4.2	4.0	4.0	3.0	2.7	2.5	2.2	2.1	6.0	5.6	5.5	4.9	4.6
Agriculture, forestry, and fishing 4/ ...	11.5	11.3	7.1	8.7	12.9	5.0	4.7	3.8	3.0	6.7	4.2	3.9	3.2	2.8	5.3	6.5	6.6	3.3	5.7	6.2
Mining 5/ .....	10.3	9.5	8.8	-	9.7	5.1	5.9	4.6	-	6.2	4.6	5.4	4.1	-	4.7	5.2	3.6	4.2	-	3.5
Construction .....	15.4	13.5	11.7	12.2	11.3	6.8	6.1	4.7	5.8	5.3	6.0	5.3	3.7	4.7	4.0	8.6	7.4	7.0	6.3	6.1
Manufacturing .....	15.7	14.6	14.2	12.5	14.3	6.5	6.7	6.7	5.8	6.8	3.4	3.1	2.9	2.3	2.5	9.3	7.9	7.5	6.7	7.5
Durable goods .....	14.6	13.9	12.6	12.4	14.0	5.1	5.4	5.0	5.2	6.2	3.2	3.1	2.6	2.4	2.3	9.5	8.5	7.6	7.1	7.9
Nondurable goods .....	17.2	15.5	16.4	12.7	14.7	8.3	8.2	8.9	6.6	7.8	3.7	3.1	3.3	2.2	2.8	8.9	7.2	7.5	6.1	6.9
Transportation and public utilities 5/ ..	10.9	8.5	9.2	7.1	6.5	5.9	5.0	4.8	3.6	3.7	4.6	3.5	2.9	2.2	2.5	5.0	3.6	4.3	3.6	2.8
Wholesale and retail trade .....	9.2	8.2	8.8	7.6	6.7	3.9	3.0	3.6	3.5	2.9	2.9	2.3	2.4	2.0	1.6	5.3	5.2	5.2	4.2	3.8
Wholesale trade .....	8.6	9.1	8.5	7.3	6.7	3.9	3.7	3.6	3.6	3.2	2.9	2.7	2.4	1.7	2.0	4.7	5.4	4.8	3.8	3.6
Retail trade .....	9.4	7.8	8.9	7.8	6.6	3.8	2.7	3.5	3.4	2.8	2.9	2.2	2.3	2.1	1.3	5.6	5.1	5.4	4.3	3.9
Finance, insurance, and real estate ...	2.8	2.5	2.8	4.0	2.0	1.0	1.0	1.2	1.1	0.8	0.8	0.7	0.7	0.9	0.7	1.8	1.5	1.6	2.8	1.1
Services .....	7.3	8.4	8.0	7.9	6.6	2.7	3.1	3.1	3.2	3.0	2.1	2.2	2.1	2.0	1.9	4.6	5.4	4.9	4.8	3.7

1/ The incidence rates represent the number of injuries and/or illnesses per 100 full-time equivalent employees and were calculated as:  $(N/EH) \times 200,000$ , where:

N = number of injuries and/or illnesses  
EH = total hours worked by all employees during the calendar year

200,000 = base for 100 full-time workers (working 40 hours per week, 50 weeks per year)

2/ Total includes cases involving restricted work activity only in addition to days-away-from-work cases with or without restricted work activity.

3/ Days away-from-work cases include those which result in days away from work with or without restricted work activity.

4/Excludes farms with fewer than 11 employees.

5/ Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

6/ In 1996, air courier operations previously classified in Industry Group 421, 422, 423, 452, 473, 478 were reclassified to Industry Group 451. As a result, the 1996 estimates for the SIC's and M Industry Groups 42, 45, and 47 are not comparable to those for prior years. In addition, the 1996 estimates for transportation and public utilities may have more variability than those for prior year

Note: Because of rounding, components may not add to the totals.

Source: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

**Table 4**  
**Nonfatal Occupational Injury and Illness Incidence Rates per 100 Full-Time Workers 1/ by Industry Division**  
**Kansas and the United States, 1996 and 1997**

Industry division 2/	Total cases 3/				Total lost workday cases				Cases without lost workdays			
	Kansas		US		Kansas		US		Kansas		US	
	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997	1996	1997
Private industry 4/ . . . . .	8.9	8.6	7.4	7.1	4.0	4.0	3.4	3.3	4.9	4.6	4.1	3.8
Agriculture, forestry, and fishing 4/ . . . . .	8.7	12.9	8.7	8.4	3.0	6.7	3.9	4.1	5.7	6.2	4.8	4.2
Mining . . . . .		9.7	5.4	5.9		6.2	3.2	3.7		3.5	2.2	2.1
Construction . . . . .	12.2	11.3	9.9	9.5	5.8	5.3	4.5	4.4	6.3	6.1	5.4	5.0
Manufacturing . . . . .	12.5	14.3	10.6	10.3	5.8	6.8	4.9	4.8	6.7	7.5	5.7	5.4
Durable goods . . . . .	12.4	14.0	11.6	11.3	5.2	6.2	5.1	5.1	7.1	7.9	6.5	6.2
Nondurable goods . . . . .	12.7	14.7	9.2	8.8	6.6	7.8	4.6	4.4	6.1	6.9	4.6	4.3
Transportation and public utilities 5/ . . . . .	7.1	6.5	8.7	8.2	3.6	3.7	5.1	4.8	3.6	2.8	3.6	3.4
Wholesale and retail trade . . . . .	7.6	6.7	6.8	6.7	3.5	2.9	2.9	3.0	4.2	3.8	3.9	3.7
Wholesale trade . . . . .	7.3	6.7	6.6	6.5	3.6	3.2	3.4	3.2	3.8	3.6	3.3	3.3
Retail trade . . . . .	7.8	6.6	6.9	6.8	3.4	2.8	2.8	2.9	4.3	3.9	4.1	3.9
Finance, insurance, and real estate . . . . .	4.0	2.0	2.4	2.2	1.1	0.8	0.9	0.9	2.8	1.1	1.4	1.4
Services . . . . .	7.9	6.6	6.0	5.6	3.2	3.0	2.6	2.5	4.8	3.7	3.4	3.1

1/The incidence rates represent the number of injuries and/or illnesses or lost workdays per 100 full-time employees and were calculated as:  $(N/EH) \times 200,000$ , where:

N = number of injuries and/or illnesses, or lost workdays;

EH = total hours worked by all employees during the calendar year;

200,000 = base for 100 full-time workers (working 40 hours per week, 50 weeks per year).

2/Industry divisions and group totals include data for industries not shown separately.

3/Includes fatalities; however, due to rounding, the difference between the total and the sum of the rates for total lost workday cases without lost workdays may not reflect the fatality rate.

4/Excludes farms with fewer than 11 employees.

5/ In 1996, air courier operations previously classified in Industry Group 421, 422, 423, 452, 473, and 478 were reclassified to Industry Group 451. As a result, the 1996 estimates for the SIC's and Major Industry Groups 42, 45, and 47 are not comparable to those for prior years. In addition, the 1996 estimates for transportation and public utilities may have more variability than those for prior years.

**Table 5**  
**Nonfatal Occupational Injury and Illness Incidence Rates per 100 Full-Time Workers 1/**  
**Kansas, 1976 - 1997**

Year	Injuries and Illnesses				Injuries			
	Total Cases	Lost Workday Cases		Cases without lost workdays	Total Cases	Lost Workday Cases		Cases without lost workdays
		Total 3/	With days away from work 4/			Total 3/	With days away from work 4/	
1976. ....	8.4	3.3	3.1	5.2	8.1	3.1	3.0	5.0
1977. ....	8.5	3.5	3.3	5.0	8.1	3.3	3.2	4.8
1978 5/...	8.8	3.8	3.5	5.0	8.5	3.7	3.5	4.8
1979 5/...	8.6	4.0	3.6	4.7	8.4	3.8	3.5	4.5
1980. ....	8.1	3.6	3.3	4.5	7.9	3.5	3.2	4.4
1981. ....	8.4	3.7	3.3	4.7	8.1	3.6	3.3	4.5
1982. ....	7.5	3.1	2.8	4.3	7.2	3.0	2.7	4.2
1983 5/...	7.5	3.3	2.9	4.3	7.3	3.1	2.8	4.1
1984 5/...	7.7	3.4	3.0	4.2	7.4	3.3	2.9	4.1
1985. ....	7.7	3.4	3.0	4.3	7.5	3.3	2.9	4.2
1986. ....	7.6	3.3	2.9	4.3	7.3	3.1	2.8	4.1
1987. ....	8.6	3.8	3.1	4.8	8.2	3.6	3.0	4.6
1988. ....	9.5	4.0	3.2	5.5	9.0	3.8	3.1	5.2
1989. ....	10.0	4.3	3.4	5.7	9.4	4.1	3.2	5.3
1990. ....	9.9	4.2	3.3	5.7	9.1	3.8	3.1	5.2
1991. ....	9.8	4.3	3.3	5.5	8.9	3.9	3.1	5.0
1992 6/...	10.2	4.3	3.1	5.9	9.1	3.8	2.8	5.3
1993 6/...	10.3	4.3	3.0	6.0	9.3	3.9	2.8	5.4
1994 6/...	9.8	4.2	2.7	5.6	8.9	3.7	2.5	5.2
1995 6/...	9.7	4.2	2.5	5.5	8.8	3.7	2.3	5.0
1996 6/...	8.9	4.0	2.2	4.9	8.2	3.6	2.1	4.6
1997 6/...	8.6	4.0	2.1	4.6	7.8	3.6	2.0	4.2

1/The incidence rates represent the number of injuries and/or illnesses per 100 full-time equivalent employees and were calculated as:  $(N/EH) \times 200,000$ , where:

N = number of injuries and/or illnesses, or lost workdays;  
 EH = total hours worked by all employees during calendar year;  
 200,000 = base for 100 full-time workers (working 40 hours per week, 50 weeks per year).

2/ Data for 1976-1987 are bases on the Standard Industrial Classification Manual, 1972 Edition; and data for 1988-1996 are bases on the Standard Industrial Classification, Manual, 1987 Edition.

3/ Total includes cases involving restricted work activity only in addition to days-away-from-work cases with or without restricted work activity.

4/ Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

5/ To maintain historical comparability with the rest of the series, data for small nonfarm employers in low-risk industries who were not surveyed were imputed and included in the survey estimates.

6/ Data exclude fatal work-related injuries and illnesses.

NOTE: Because of rounding, components may not add to the totals. Data exclude farms with fewer than 11 employees.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

TABLE 6. Incidence rates<sup>1</sup> of nonfatal occupational injuries and illnesses by industry and selected case types, 1997

Kansas										
Industry <sup>2</sup>	SIC code <sup>3</sup>	1997 Annual average employment <sup>4</sup> (000's)	Injuries and illnesses				Injuries			
			Total cases	Lost workday cases		Cases without lost work-days	Total cases	Lost workday cases		Cases without lost work-days
				Total <sup>5</sup>	With days away from work <sup>6</sup>			Total <sup>5</sup>	With days away from work <sup>6</sup>	
<b>Private industry<sup>7</sup></b> .....		1,017.7	8.6	4.0	2.1	4.6	7.8	3.6	2.0	4.2
<b>Agriculture, forestry, and fishing<sup>7</sup></b> .....		14.4	12.9	6.7	5.3	6.2	12.7	6.7	5.3	6.0
Agricultural production <sup>7</sup> .....	01-02	7.0	18.1	11.3	8.7	6.8	18.1	11.3	8.7	6.8
<b>Mining<sup>8</sup></b> .....		8.2	9.7	6.2	4.7	3.5	9.5	6.1	4.6	3.5
Oil and gas extraction .....	13	6.8	10.4	6.8	5.1	3.6	10.3	6.7	5.1	3.6
Oil and gas field services .....	138	3.7	15.4	10.3	7.6	5.1	15.2	10.1	7.4	5.1
<b>Construction</b> .....		59.0	11.3	5.3	4.0	6.1	11.1	5.2	3.9	5.9
General building contractors .....	15	13.0	10.6	4.4	2.9	6.2	10.5	4.3	2.9	6.2
Nonresidential building construction .....	154	6.9	10.2	4.6	2.8	5.6	10.2	4.6	2.8	5.6
Heavy construction, except building .....	16	10.8	11.5	5.2	3.5	6.3	11.0	5.2	3.5	5.8
Heavy construction, except highway .....	162	7.1	12.4	6.3	4.4	6.1	12.1	6.3	4.4	5.8
Special trade contractors .....	17	35.2	11.5	5.6	4.5	5.9	11.4	5.5	4.4	5.9
Plumbing, heating, air-conditioning .....	171	7.7	15.0	6.4	5.5	8.7	14.7	6.1	5.2	8.6
Electrical work .....	173	5.7	12.2	4.1	3.3	8.1	12.0	4.1	3.3	8.0
Masonry, stonework, and plastering .....	174	3.8	8.3	5.7	4.8	2.6	8.1	5.5	4.6	2.6
Miscellaneous special trade contractors .....	179	5.8	11.7	5.3	3.8	6.4	11.7	5.3	3.8	6.4
<b>Manufacturing</b> .....		206.7	14.3	6.8	2.5	7.5	11.8	5.4	2.2	6.4
<b>Durable goods</b> .....		121.2	14.0	6.2	2.3	7.9	12.1	5.1	2.1	7.0
Stone, clay, and glass products .....	32	6.0	18.3	8.3	3.5	10.0	16.1	8.2	3.4	7.9
Primary metal industries .....	33	4.1	20.1	5.4	2.3	14.8	18.5	4.8	2.1	13.7
Industrial machinery and equipment .....	35	24.0	13.3	5.5	2.6	7.8	12.3	5.1	2.4	7.1
Farm and garden machinery .....	352	5.9	16.2	7.9	3.6	8.2	15.8	7.9	3.6	7.8
Farm machinery and equipment .....	3523	5.5	16.6	8.3	3.6	8.4	16.3	8.3	3.6	8.0
Lawn and garden equipment .....	3524	.4	9.4	3.4	3.4	6.0	8.9	3.4	3.4	5.5
Construction and related machinery .....	353	4.2	16.0	5.1	2.7	10.9	15.1	4.5	2.2	10.5
Industrial machinery, n.e.c. ....	359	3.6	14.2	4.4	2.6	9.8	12.7	4.1	2.4	8.6
Electronic and other electric equipment .....	36	8.6	8.1	3.5	1.0	4.6	5.9	2.5	.8	3.4
Transportation equipment .....	37	55.2	14.6	7.1	2.0	7.5	11.9	5.4	1.7	6.6
Aircraft and parts .....	372	44.7	13.5	7.2	1.7	6.3	10.8	5.4	1.4	5.4
<b>Nondurable goods</b> .....		85.4	14.7	7.8	2.8	6.9	11.4	5.9	2.3	5.5
Food and kindred products .....	20	32.6	20.9	12.2	3.1	8.7	15.0	8.6	2.6	6.4
Meat products .....	201	18.6	25.6	14.1	3.0	11.5	16.1	8.3	2.3	7.8
Meat packing plants .....	2011	15.7	26.9	14.5	3.1	12.3	16.7	8.5	2.4	8.2
Grain mill products .....	204	4.3	15.4	10.6	3.5	4.9	14.8	10.4	3.5	4.5
Paper and allied products .....	26	5.0	15.0	9.2	3.0	5.8	12.1	8.1	2.7	4.0
Printing and publishing .....	27	23.2	6.2	3.5	1.4	2.8	5.1	2.7	1.2	2.4
Newspapers .....	271	4.4	4.3	1.5	1.1	2.8	3.8	1.4	1.0	2.4
Commercial printing .....	275	7.6	7.1	3.4	1.5	3.6	6.3	3.1	1.3	3.3
Commercial printing, lithographic .....	2752	3.9	7.7	4.1	1.7	3.6	6.9	3.7	1.4	3.2
Commercial printing, gravure .....	2754	—	3.7	( <sup>9</sup> )	( <sup>9</sup> )	3.7	3.7	( <sup>9</sup> )	( <sup>9</sup> )	3.7
Commercial printing, n.e.c. ....	2759	—	6.6	2.9	1.4	3.7	5.8	2.4	1.3	3.4
Chemicals and allied products .....	28	6.5	7.0	2.4	1.5	4.6	5.8	2.0	1.4	3.8
Rubber and miscellaneous plastics products .....	30	12.2	15.9	7.0	4.0	8.9	13.8	5.9	3.2	7.9
Miscellaneous plastics products, n.e.c. ....	308	8.4	18.9	8.0	5.0	10.9	15.9	6.4	3.7	9.5
<b>Transportation and public utilities<sup>8</sup></b> .....		65.3	6.5	3.7	2.5	2.8	6.2	3.6	2.4	2.6
Communications .....	48	18.6	1.8	.9	.6	.9	1.3	.7	.5	.6
Telephone communications .....	481	14.4	1.3	.6	.5	.7	.7	.4	.4	.3

See footnotes at end of table.

TABLE 6. Incidence rates<sup>1</sup> of nonfatal occupational injuries and illnesses by industry and selected case types, 1997— Continued

## Kansas

Industry <sup>2</sup>	SIC code <sup>3</sup>	1997 Annual average employment <sup>4</sup> (000's)	Injuries and illnesses				Injuries			
			Total cases	Lost workday cases		Cases without lost work-days	Total cases	Lost workday cases		Cases without lost work-days
				Total <sup>5</sup>	With days away from work <sup>6</sup>			Total <sup>5</sup>	With days away from work <sup>6</sup>	
<b>Wholesale and retail trade .....</b>		310.1	6.7	2.9	1.6	3.8	6.3	2.7	1.5	3.7
Wholesale trade .....		76.4	6.7	3.2	2.0	3.6	6.4	2.9	1.8	3.5
Wholesale trade—durable goods .....	50	40.8	5.2	1.8	1.1	3.4	4.9	1.6	.8	3.4
Machinery, equipment, and supplies .....	508	12.3	8.0	2.3	1.9	5.7	7.9	2.2	1.8	5.7
Wholesale trade—nondurable goods .....	51	35.6	8.5	4.7	3.2	3.8	8.1	4.5	3.0	3.6
Groceries and related products .....	514	9.4	12.9	7.5	4.9	5.4	12.3	7.3	4.8	5.0
<b>Retail trade .....</b>		233.7	6.6	2.8	1.3	3.9	6.3	2.5	1.3	3.8
Building materials and garden supplies .....	52	10.4	9.1	5.0	2.7	4.0	9.0	5.0	2.7	4.0
Lumber and other building materials .....	521	5.5	12.4	7.8	4.6	4.7	12.4	7.8	4.6	4.6
General merchandise stores .....	53	32.0	7.7	3.8	2.2	4.0	7.7	3.8	2.2	3.9
Department stores .....	531	26.7	7.0	4.0	2.3	3.0	6.9	3.9	2.3	3.0
Food stores .....	54	35.1	6.0	2.4	1.3	3.6	5.9	2.4	1.3	3.5
Automotive dealers and service stations .....	55	26.4	5.5	2.4	1.7	3.1	5.5	2.4	1.7	3.1
New and used car dealers .....	551	11.3	5.0	1.9	1.5	3.1	5.0	1.9	1.5	3.1
Furniture and home furnishings stores .....	57	10.3	4.2	2.4	1.2	1.8	3.9	2.1	.9	1.8
Eating and drinking places .....	58	82.4	7.1	1.7	.7	5.5	7.0	1.7	.7	5.3
Miscellaneous retail .....	59	25.9	3.1	1.1	1.0	2.0	3.0	1.0	.9	1.9
<b>Finance, insurance, and real estate .....</b>		60.0	2.0	.8	.7	1.1	1.7	.8	.6	.9
Real estate .....	65	10.4	3.3	1.6	.8	1.7	3.3	1.6	.8	1.7
<b>Services .....</b>		294.1	6.6	3.0	1.9	3.7	6.4	2.9	1.9	3.5
Hotels and other lodging places .....	70	10.0	7.7	2.8	1.5	4.9	7.7	2.7	1.5	4.9
Personal services .....	72	12.4	5.1	2.7	1.6	2.4	4.4	2.1	1.4	2.3
Business services .....	73	64.9	3.5	1.3	.7	2.2	3.1	1.1	.6	2.0
Personnel supply services .....	736	20.2	4.4	2.9	1.4	1.5	4.0	2.8	1.4	1.2
Miscellaneous business services .....	738	16.6	2.7	.8	.6	1.9	2.3	.5	.4	1.7
Auto repair, services, and parking .....	75	9.4	7.1	2.4	1.6	4.7	7.1	2.4	1.6	4.7
Miscellaneous repair services .....	76	5.3	4.7	2.4	2.0	2.3	4.6	2.4	2.0	2.2
Miscellaneous repair shops .....	769	3.4	5.8	3.3	2.7	2.6	5.7	3.3	2.7	2.5
Amusement and recreation services .....	79	11.6	9.3	3.4	1.1	5.9	9.2	3.4	1.1	5.8
Health services .....	80	102.7	9.3	4.4	3.1	4.8	9.1	4.4	3.1	4.7
Nursing and personal care facilities .....	805	26.6	11.9	9.7	6.8	2.2	11.9	9.7	6.8	2.2
Hospitals .....	806	36.5	15.0	5.2	3.9	9.9	14.8	5.1	3.8	9.7
Educational services .....	82	7.5	2.9	.9	.6	2.0	2.9	.9	.6	2.0
Social services .....	83	25.2	8.6	4.7	3.4	3.9	8.2	4.6	3.4	3.6
Membership organizations .....	86	8.3	1.7	.6	.4	1.1	1.7	.6	.4	1.1
Engineering and management services .....	87	26.7	4.3	1.5	.6	2.8	4.0	1.4	.5	2.7

<sup>1</sup> The incidence rates represent the number of injuries and illnesses per 100 full-time workers and were calculated as:  $(N/EH) \times 200,000$ , where

N = number of injuries and illnesses  
 EH = total hours worked by all employees during the calendar year  
 200,000 = base for 100 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

work with or without restricted work activity.

<sup>7</sup> Excludes farms with fewer than 11 employees.

<sup>8</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor, and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

<sup>9</sup> Incidence rate less than 0.05.

NOTE: Because of rounding, components may not add to totals.

n.e.c. = not elsewhere classified.

— Indicates data not available.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies

<sup>2</sup> Totals include data for industries not shown separately.

<sup>3</sup> Standard Industrial Classification Manual, 1987 Edition.

<sup>4</sup> Employment is expressed as an annual average and is derived primarily from the BLS-State Covered Employment and Wages program. Employment in private households (SIC 88) is excluded.

<sup>5</sup> Total lost workday cases involve days away from work, or days of restricted work activity, or both.

<sup>6</sup> Days-away-from-work cases include those which result in days away from



TABLE 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1997

## Kansas

(thousands)

Industry <sup>1</sup>	SIC code <sup>2</sup>	1997 Annual average employment <sup>3</sup>	Injuries and illnesses				Injuries			
			Total cases	Lost workday cases		Cases without lost work-days	Total cases	Lost workday cases		Cases without lost work-days
				Total <sup>4</sup>	With days away from work <sup>5</sup>			Total <sup>4</sup>	With days away from work <sup>5</sup>	
<b>Private industry<sup>6</sup></b> .....		1,017.7	75.0	35.1	18.5	39.9	68.0	31.2	17.4	36.7
<b>Agriculture, forestry, and fishing<sup>6</sup></b> .....		14.4	1.4	.7	.6	.7	1.4	.7	.6	.6
Agricultural production <sup>6</sup> .....	01-02	7.0	1.0	.6	.5	.4	1.0	.6	.5	.4
<b>Mining<sup>7</sup></b> .....		8.2	.8	.5	.4	.3	.8	.5	.4	.3
Oil and gas extraction .....	13	6.8	.7	.5	.4	.2	.7	.5	.3	.2
Oil and gas field services .....	138	3.7	.6	.4	.3	.2	.6	.4	.3	.2
<b>Construction</b> .....		59.0	6.3	2.9	2.2	3.4	6.2	2.9	2.2	3.3
General building contractors .....	15	13.0	1.2	.5	.3	.7	1.2	.5	.3	.7
Nonresidential building construction .....	154	6.9	.7	.3	.2	.4	.7	.3	.2	.4
Heavy construction, except building .....	16	10.8	1.3	.6	.4	.7	1.3	.6	.4	.7
Heavy construction, except highway .....	162	7.1	.9	.5	.3	.5	.9	.5	.3	.4
Special trade contractors .....	17	35.2	3.8	1.8	1.5	1.9	3.7	1.8	1.5	1.9
Plumbing, heating, air-conditioning .....	171	7.7	1.1	.5	.4	.6	1.1	.5	.4	.6
Electrical work .....	173	5.7	.7	.2	.2	.4	.7	.2	.2	.4
Masonry, stonework, and plastering .....	174	3.8	.3	.2	.2	.1	.3	.2	.1	.1
Miscellaneous special trade contractors .....	179	5.8	.7	.3	.2	.4	.7	.3	.2	.4
<b>Manufacturing</b> .....		206.7	30.1	14.4	5.3	15.7	24.8	11.4	4.6	13.3
<b>Durable goods</b> .....		121.2	17.6	7.7	2.9	9.8	15.1	6.4	2.6	8.7
Stone, clay, and glass products .....	32	6.0	1.2	.5	.2	.6	1.0	.5	.2	.5
Primary metal industries .....	33	4.1	.8	.2	.1	.6	.8	.2	.1	.6
Industrial machinery and equipment .....	35	24.0	3.3	1.4	.6	1.9	3.1	1.3	.6	1.8
Farm and garden machinery .....	352	5.9	1.0	.5	.2	.5	1.0	.5	.2	.5
Farm machinery and equipment .....	3523	5.5	1.0	.5	.2	.5	.9	.5	.2	.5
Lawn and garden equipment .....	3524	.4	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
Construction and related machinery .....	353	4.2	.7	.2	.1	.5	.7	.2	.1	.5
Industrial machinery, n.e.c. ....	359	3.6	.5	.2	.1	.4	.5	.2	.1	.3
Electronic and other electric equipment .....	36	8.6	.7	.3	.1	.4	.5	.2	.1	.3
Transportation equipment .....	37	55.2	8.4	4.1	1.1	4.3	6.9	3.1	1.0	3.8
Aircraft and parts .....	372	44.7	6.3	3.4	.8	2.9	5.0	2.5	.7	2.5
<b>Nondurable goods</b> .....		85.4	12.5	6.6	2.3	5.9	9.6	5.0	2.0	4.6
Food and kindred products .....	20	32.6	7.1	4.2	1.1	3.0	5.1	2.9	.9	2.2
Meat products .....	201	18.6	5.1	2.8	.6	2.3	3.2	1.7	.5	1.5
Meat packing plants .....	2011	15.7	4.5	2.5	.5	2.1	2.8	1.4	.4	1.4
Grain mill products .....	204	4.3	.7	.5	.2	.2	.7	.5	.2	.2
Paper and allied products .....	26	5.0	.8	.5	.1	.3	.6	.4	.1	.2
Printing and publishing .....	27	23.2	1.3	.7	.3	.6	1.1	.6	.3	.5
Newspapers .....	271	4.4	.1	( <sup>8</sup> )	( <sup>8</sup> )	.1	.1	( <sup>8</sup> )	( <sup>8</sup> )	.1
Commercial printing .....	275	7.6	.5	.2	.1	.3	.5	.2	.1	.2
Commercial printing, lithographic .....	2752	3.9	.3	.1	.1	.1	.3	.1	.1	.1
Commercial printing, gravure .....	2754	—	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )	( <sup>8</sup> )
Commercial printing, n.e.c. ....	2759	—	.2	.1	( <sup>8</sup> )	.1	.2	.1	( <sup>8</sup> )	.1
Chemicals and allied products .....	28	6.5	.5	.2	.1	.3	.4	.1	.1	.3
Rubber and miscellaneous plastics products .....	30	12.2	1.8	.8	.5	1.0	1.6	.7	.4	.9
Miscellaneous plastics products, n.e.c. ....	308	8.4	1.5	.6	.4	.8	1.2	.5	.3	.7
<b>Transportation and public utilities<sup>7</sup></b> .....		65.3	4.3	2.5	1.6	1.8	4.1	2.4	1.6	1.7
Communications .....	48	18.6	.3	.2	.1	.2	.2	.1	.1	.1
Telephone communications .....	481	14.4	.2	.1	.1	.1	.1	.1	.1	( <sup>8</sup> )

See footnotes at end of table.

TABLE 7. Number of nonfatal occupational injuries and illnesses by industry and selected case types, 1997— Continued

## Kansas

(in thousands)

Industry <sup>1</sup>	SIC code <sup>2</sup>	1997 Annual average employment <sup>3</sup>	Injuries and illnesses				Injuries			
			Total cases	Lost workday cases		Cases without lost work-days	Total cases	Lost workday cases		Cases without lost work-days
				Total <sup>4</sup>	With days away from work <sup>5</sup>			Total <sup>4</sup>	With days away from work <sup>5</sup>	
<b>Wholesale and retail trade .....</b>		310.1	16.6	7.2	3.9	9.4	15.8	6.6	3.7	9.2
Wholesale trade .....		76.4	5.2	2.5	1.6	2.8	5.0	2.3	1.4	2.7
Wholesale trade—durable goods .....	50	40.8	2.2	.8	.5	1.4	2.1	.7	.4	1.4
Machinery, equipment, and supplies .....	508	12.3	1.0	.3	.2	.7	1.0	.3	.2	.7
Wholesale trade—nondurable goods .....	51	35.6	3.0	1.7	1.1	1.3	2.9	1.6	1.1	1.3
Groceries and related products .....	514	9.4	1.2	.7	.5	.5	1.2	.7	.4	.5
<b>Retail trade .....</b>		233.7	11.4	4.8	2.3	6.6	10.8	4.4	2.2	6.5
Building materials and garden supplies .....	52	10.4	.8	.4	.2	.4	.8	.4	.2	.4
Lumber and other building materials .....	521	5.5	.6	.4	.2	.2	.6	.4	.2	.2
General merchandise stores .....	53	32.0	1.7	.8	.5	.9	1.7	.8	.5	.9
Department stores .....	531	26.7	1.2	.7	.4	.5	1.2	.7	.4	.5
Food stores .....	54	35.1	1.5	.6	.3	.9	1.4	.6	.3	.9
Automotive dealers and service stations .....	55	26.4	1.4	.6	.4	.8	1.4	.6	.4	.8
New and used car dealers .....	551	11.3	.6	.2	.2	.4	.6	.2	.2	.4
Furniture and home furnishings stores .....	57	10.3	.4	.2	.1	.2	.3	.2	.1	.2
Eating and drinking places .....	58	82.4	3.9	.9	.4	3.0	3.8	.9	.4	2.9
Miscellaneous retail .....	59	25.9	.5	.2	.2	.4	.5	.2	.2	.3
<b>Finance, insurance, and real estate .....</b>		60.0	1.0	.4	.3	.6	.9	.4	.3	.5
Real estate .....	65	10.4	.3	.1	.1	.1	.3	.1	.1	.1
<b>Services .....</b>		294.1	14.5	6.5	4.2	8.0	14.0	6.3	4.1	7.8
Hotels and other lodging places .....	70	10.0	.5	.2	.1	.3	.5	.2	.1	.3
Personal services .....	72	12.4	.4	.2	.1	.2	.4	.2	.1	.2
Business services .....	73	64.9	1.4	.5	.3	.9	1.2	.5	.2	.8
Personnel supply services .....	736	20.2	.2	.1	.1	.1	.2	.1	.1	.1
Miscellaneous business services .....	738	16.6	.3	.1	.1	.2	.3	.1	( <sup>8</sup> )	.2
Auto repair, services, and parking .....	75	9.4	.6	.2	.1	.4	.6	.2	.1	.4
Miscellaneous repair services .....	76	5.3	.2	.1	.1	.1	.2	.1	.1	.1
Miscellaneous repair shops .....	769	3.4	.2	.1	.1	.1	.2	.1	.1	.1
Amusement and recreation services .....	79	11.6	.7	.2	.1	.4	.7	.2	.1	.4
Health services .....	80	102.7	7.6	3.6	2.6	4.0	7.5	3.6	2.6	3.9
Nursing and personal care facilities .....	805	26.6	2.4	2.0	1.4	.5	2.4	2.0	1.4	.5
Hospitals .....	806	36.5	4.3	1.5	1.1	2.8	4.2	1.5	1.1	2.8
Educational services .....	82	7.5	.2	.1	( <sup>8</sup> )	.1	.2	.1	( <sup>8</sup> )	.1
Social services .....	83	25.2	1.4	.8	.6	.6	1.3	.7	.6	.6
Membership organizations .....	86	8.3	.1	( <sup>8</sup> )	( <sup>8</sup> )	.1	.1	( <sup>8</sup> )	( <sup>8</sup> )	.1
Engineering and management services .....	87	26.7	1.1	.4	.2	.7	1.0	.4	.1	.7

<sup>1</sup> Totals include data for industries not shown separately.<sup>2</sup> Standard Industrial Classification Manual, 1987 Edition.<sup>3</sup> Employment is expressed as an annual average and is derived primarily from the BLS-State Covered Employment and Wages program. Employment in private households (SIC 88) is excluded.<sup>4</sup> Total lost workday cases involve days away from work, or days of restricted work activity, or both.<sup>5</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.<sup>6</sup> Excludes farms with fewer than 11 employees.<sup>7</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the

Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

<sup>8</sup> Fewer than 50 cases.

NOTE: Because of rounding, components may not add to totals.

n.e.c. = not elsewhere classified.

- Indicates data not available.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies

TABLE 8. Nonfatal occupational illness incidence rates by industry and category of illness, 1997

Kansas									
Industry <sup>1</sup>	SIC code <sup>2</sup>	Incidence rates per 10,000 full-time workers <sup>3</sup>							
		Total cases	Skin diseases or disorders	Dust diseases of the lungs	Respiratory conditions due to toxic agents	Poisoning	Disorders due to physical agents	Disorders associated with repeated trauma	All other occupational illnesses
<b>Private industry<sup>4</sup></b> .....		81.1	6.2	0.5	1.5	0.8	1.9	63.9	6.3
<b>Agriculture, forestry, and fishing<sup>4</sup></b> .....		17.9	9.4	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	1.9	7.5
Agricultural production <sup>4</sup> .....	01-02	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
<b>Mining<sup>6</sup></b> .....		12.9	( <sup>5</sup> )	( <sup>5</sup> )	1.2	( <sup>5</sup> )	1.2	10.5	( <sup>5</sup> )
Oil and gas extraction .....	13	8.7	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	8.7	( <sup>5</sup> )
<b>Construction</b> .....		17.8	3.2	( <sup>5</sup> )	2.3	( <sup>5</sup> )	2.7	1.4	8.0
General building contractors .....	15	6.0	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	5.2	.9	( <sup>5</sup> )
Heavy construction, except building .....	16	49.1	5.2	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	7.7	( <sup>5</sup> )	35.3
Special trade contractors .....	17	11.0	3.7	( <sup>5</sup> )	4.0	( <sup>5</sup> )	( <sup>5</sup> )	2.1	1.2
<b>Manufacturing</b> .....		252.0	18.6	.5	3.7	2.2	4.8	204.8	17.5
Durable goods .....		195.3	17.8	.7	4.5	2.0	2.6	145.3	22.4
Stone, clay, and glass products .....	32	-	34.9	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	12.7	-
Primary metal industries .....	33	166.9	7.2	( <sup>5</sup> )	9.5	( <sup>5</sup> )	( <sup>5</sup> )	150.2	( <sup>5</sup> )
Industrial machinery and equipment .....	35	102.5	10.0	2.0	( <sup>5</sup> )	( <sup>5</sup> )	2.4	86.5	1.2
Electronic and other electric equipment .....	36	215.9	10.2	4.5	4.5	19.3	2.3	137.5	38.6
Transportation equipment .....	37	261.6	26.0	( <sup>5</sup> )	8.3	.2	3.8	208.5	14.7
Nondurable goods .....		335.8	19.8	.2	2.5	2.4	7.9	292.7	10.3
Food and kindred products .....	20	589.1	39.8	.6	2.9	2.6	18.2	504.2	20.8
Paper and allied products .....	26	290.9	8.0	( <sup>5</sup> )	19.9	( <sup>5</sup> )	8.0	249.1	8.0
Printing and publishing .....	27	112.7	3.9	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	107.8	.5
Chemicals and allied products .....	28	120.5	23.8	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	3.0	93.7	( <sup>5</sup> )
Rubber and miscellaneous plastics products .....	30	209.7	3.5	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	195.9	10.4
<b>Transportation and public utilities<sup>6</sup></b> .....		31.9	5.4	( <sup>5</sup> )	1.7	.2	3.9	19.4	1.5
Communications .....	48	51.6	( <sup>5</sup> )	( <sup>5</sup> )	4.5	( <sup>5</sup> )	11.3	30.0	5.7
<b>Wholesale and retail trade</b> .....		33.7	.2	.4	( <sup>5</sup> )	( <sup>5</sup> )	.7	30.9	1.4
Wholesale trade .....		33.5	.3	.8	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	27.9	4.5
Wholesale trade--durable goods .....	50	-	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	-	( <sup>5</sup> )
Wholesale trade--nondurable goods .....	51	39.4	.6	1.7	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	27.0	9.8
Retail trade .....		33.7	.1	.1	( <sup>5</sup> )	( <sup>5</sup> )	1.1	32.3	.1
Building materials and garden supplies .....	52	4.5	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	4.5	( <sup>5</sup> )
General merchandise stores .....	53	5.1	.5	.9	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	2.8	.5
Food stores .....	54	8.6	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	8.6	( <sup>5</sup> )
Automotive dealers and service stations .....	55	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Furniture and home furnishings stores .....	57	24.7	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	24.7	( <sup>5</sup> )

See footnotes at end of table.

TABLE 8. Nonfatal occupational illness incidence rates by industry and category of illness, 1997— Continued

Kansas									
Industry <sup>1</sup>	SIC code <sup>2</sup>	Incidence rates per 10,000 full-time workers <sup>3</sup>							
		Total cases	Skin diseases or disorders	Dust diseases of the lungs	Respiratory conditions due to toxic agents	Poisoning	Disorders due to physical agents	Disorders associated with repeated trauma	All other occupational illnesses
Eating and drinking places .....	58	11.1	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	11.1	( <sup>5</sup> )
Miscellaneous retail .....	59	10.7	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	10.7	( <sup>5</sup> )
Finance, insurance, and real estate .....		26.1	( <sup>5</sup> )	( <sup>5</sup> )	1.4	( <sup>5</sup> )	( <sup>5</sup> )	24.7	( <sup>5</sup> )
Real estate .....	65	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Services .....		21.0	3.9	1.2	1.1	1.1	—	10.0	3.6
Hotels and other lodging places .....	70	4.3	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	4.3
Personal services .....	72	67.4	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	32.5	34.9
Business services .....	73	36.5	( <sup>5</sup> )	6.5	2.2	( <sup>5</sup> )	( <sup>5</sup> )	25.5	2.5
Auto repair, services, and parking .....	75	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Miscellaneous repair services .....	76	6.0	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	6.0	( <sup>5</sup> )
Amusement and recreation services .....	79	—	8.4	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Health services .....	80	—	3.9	( <sup>5</sup> )	—	( <sup>5</sup> )	—	—	2.7
Educational services .....	82	1.7	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	1.7	( <sup>5</sup> )	( <sup>5</sup> )
Social services .....	83	38.3	26.0	( <sup>5</sup> )	3.1	3.1	( <sup>5</sup> )	—	5.6
Membership organizations .....	86	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )	( <sup>5</sup> )
Engineering and management services .....	87	21.3	2.8	( <sup>5</sup> )	3.2	7.9	( <sup>5</sup> )	5.1	2.8

<sup>1</sup> Totals include data for industries not shown separately.<sup>2</sup> *Standard Industrial Classification Manual*, 1987 Edition.<sup>3</sup> The incidence rates represent the number of illnesses per 10,000 full-time workers and were calculated as:  $(N/EH) \times 20,000,000$ , where

N = number of illnesses

EH = total hours worked by all employees during the calendar year

20,000,000 = base for 10,000 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

<sup>6</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to totals.

— Indicates data not available.

<sup>4</sup> Excludes farms with fewer than 11 employees.<sup>5</sup> Incidence rate less than 0.05.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies

TABLE 9. Number of new cases of nonfatal occupational illnesses by industry and category of illness, 1997

## Kansas

(in thousands)

Industry <sup>1</sup>	SIC code <sup>2</sup>	Total cases	Number of illnesses by category						
			Skin diseases or disorders	Dust diseases of the lungs	Respiratory conditions due to toxic agents	Poisoning	Disorders due to physical agents	Disorders associated with repeated trauma	All other occupational illnesses
<b>Private industry<sup>3</sup></b> .....		7.1	0.5	( <sup>4</sup> )	0.1	0.1	0.2	5.6	0.5
<b>Agriculture, forestry, and fishing<sup>3</sup></b> .....		( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Agricultural production <sup>3</sup> .....	01-02	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
<b>Mining<sup>5</sup></b> .....		( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Oil and gas extraction .....	13	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
<b>Construction</b> .....		.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
General building contractors .....	15	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Heavy construction, except building .....	16	.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Special trade contractors .....	17	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
<b>Manufacturing</b> .....		5.3	.4	( <sup>4</sup> )	.1	( <sup>4</sup> )	.1	4.3	.4
Durable goods .....		2.4	.2	( <sup>4</sup> )	.1	( <sup>4</sup> )	( <sup>4</sup> )	1.8	.3
Stone, clay, and glass products .....	32	-	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	-
Primary metal industries .....	33	.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	( <sup>4</sup> )
Industrial machinery and equipment .....	35	.3	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.2	( <sup>4</sup> )
Electronic and other electric equipment .....	36	.2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	( <sup>4</sup> )
Transportation equipment .....	37	1.5	.2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	1.2	.1
Nondurable goods .....		2.8	.2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	2.5	.1
Food and kindred products .....	20	2.0	.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	1.7	.1
Paper and allied products .....	26	.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	( <sup>4</sup> )
Printing and publishing .....	27	.2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.2	( <sup>4</sup> )
Chemicals and allied products .....	28	.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	( <sup>4</sup> )
Rubber and miscellaneous plastics products .....	30	.2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.2	( <sup>4</sup> )
<b>Transportation and public utilities<sup>5</sup></b> .....		.2	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	( <sup>4</sup> )
Communications .....	48	.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	( <sup>4</sup> )
<b>Wholesale and retail trade</b> .....		.8	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.8	( <sup>4</sup> )
Wholesale trade .....		.3	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.2	( <sup>4</sup> )
Wholesale trade--durable goods .....	50	-	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	-	( <sup>4</sup> )
Wholesale trade--nondurable goods .....	51	.1	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.1	( <sup>4</sup> )
Retail trade .....		.6	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	.6	( <sup>4</sup> )
Building materials and garden supplies .....	52	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
General merchandise stores .....	53	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Food stores .....	54	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Automotive dealers and service stations .....	55	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )
Furniture and homefurnishings stores .....	57	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )	( <sup>4</sup> )

See footnotes at end of table.

3LE 9. Number of new cases of nonfatal occupational illnesses by industry and category of illness, 1997— Continued

Kansas

(thousands)

Industry <sup>1</sup>	SIC code <sup>2</sup>	Total cases	Number of illnesses by category						
			Skin diseases or disorders	Dust diseases of the lungs	Respiratory conditions due to toxic agents	Poisoning	Disorders due to physical agents	Disorders associated with repeated trauma	All other occupational illnesses
Eating and drinking places .....	58	0.1	(4)	(4)	(4)	(4)	(4)	0.1	(4)
Miscellaneous retail .....	59	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Finance, insurance, and real estate .....		.1	(4)	(4)	(4)	(4)	(4)	.1	(4)
Real estate .....	65	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Services .....		.5	.1	(4)	(4)	(4)	—	.2	.1
Hotels and other lodging places .....	70	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Personal services .....	72	.1	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Business services .....	73	.1	(4)	(4)	(4)	(4)	(4)	.1	(4)
Auto repair, services, and parking .....	75	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Miscellaneous repair services .....	76	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Amusement and recreation services .....	79	—	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Health services .....	80	—	(4)	(4)	—	(4)	—	—	(4)
Educational services .....	82	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Social services .....	83	.1	(4)	(4)	(4)	(4)	(4)	—	(4)
Membership organizations .....	86	(4)	(4)	(4)	(4)	(4)	(4)	(4)	(4)
Engineering and management services .....	87	.1	(4)	(4)	(4)	(4)	(4)	(4)	(4)

<sup>1</sup> Totals include data for industries not shown separately.

<sup>2</sup> Standard Industrial Classification Manual, 1987 Edition.

<sup>3</sup> Excludes farms with fewer than 11 employees.

<sup>4</sup> Fewer than 50 cases.

<sup>5</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent

mining contractors are excluded from the coal, metal, and nonmetal mining industries.

NOTE: Because of rounding, components may not add to totals.

— Indicates data not available.

SOURCE: Bureau of Labor Statistics, U.S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies

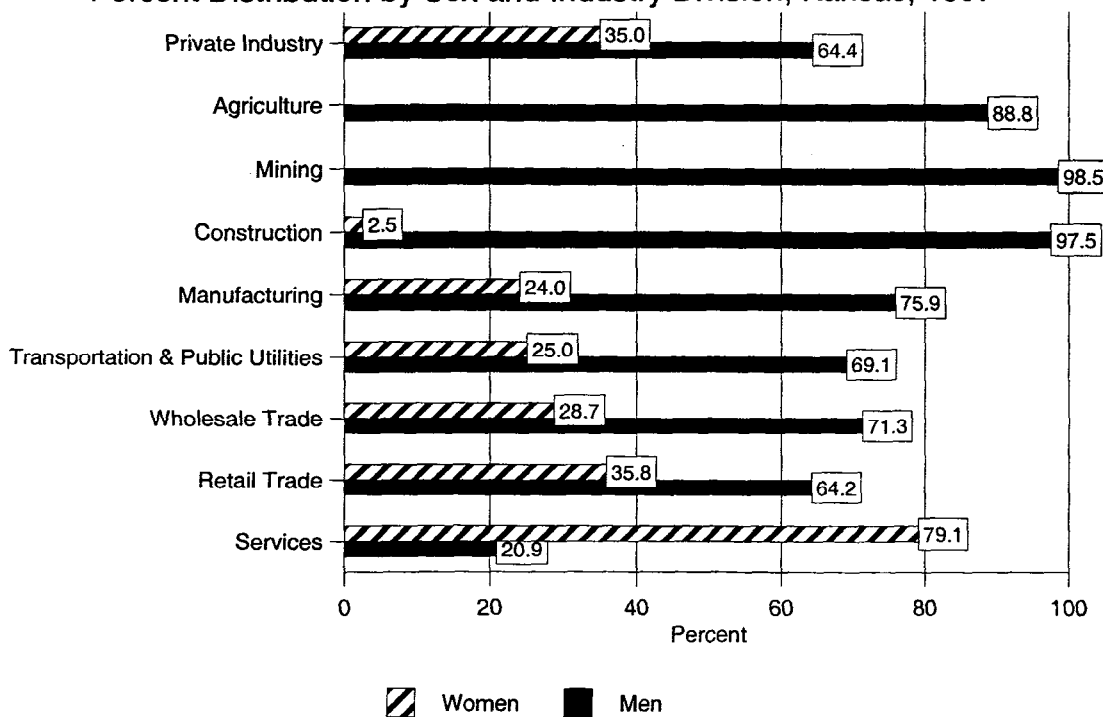
## **Part II**

### **Case Characteristics**

## 1997 CASE CHARACTERISTICS

- Of the 18,547 injuries and illnesses involving days away from work, nearly two-thirds (11,952) occurred to men while 35% (6,491) occurred to women. (Table 1)
- Occupational injuries or illnesses involving days away from work in the agriculture, forestry & fishing, mining, and construction industries occurred virtually all to men.
- Nearly 8 out of 10 occupational injuries or illnesses involving days away from work that occurred in the services industry were to women.

Chart 1. Nonfatal Occupational Injury and Illness Cases\*  
Percent Distribution by Sex and Industry Division, Kansas, 1997

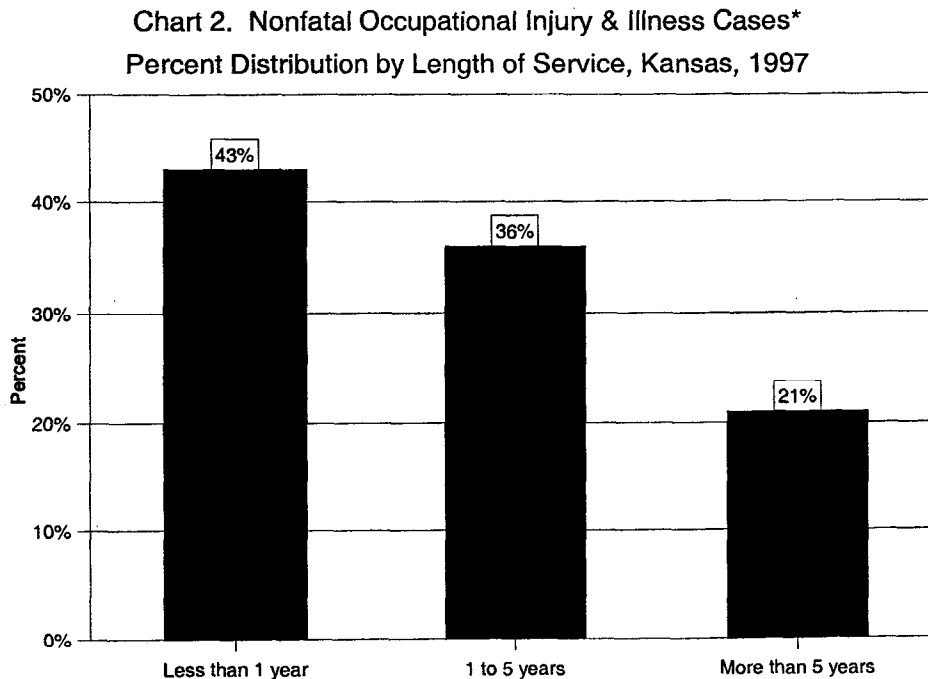


\*involving days away from work

- Retail trade was the industry in which the number of occupational injuries and illnesses were closest to being evenly distributed with 64% occurring to men and 36% occurring to women. (Chart 1, Table 2)



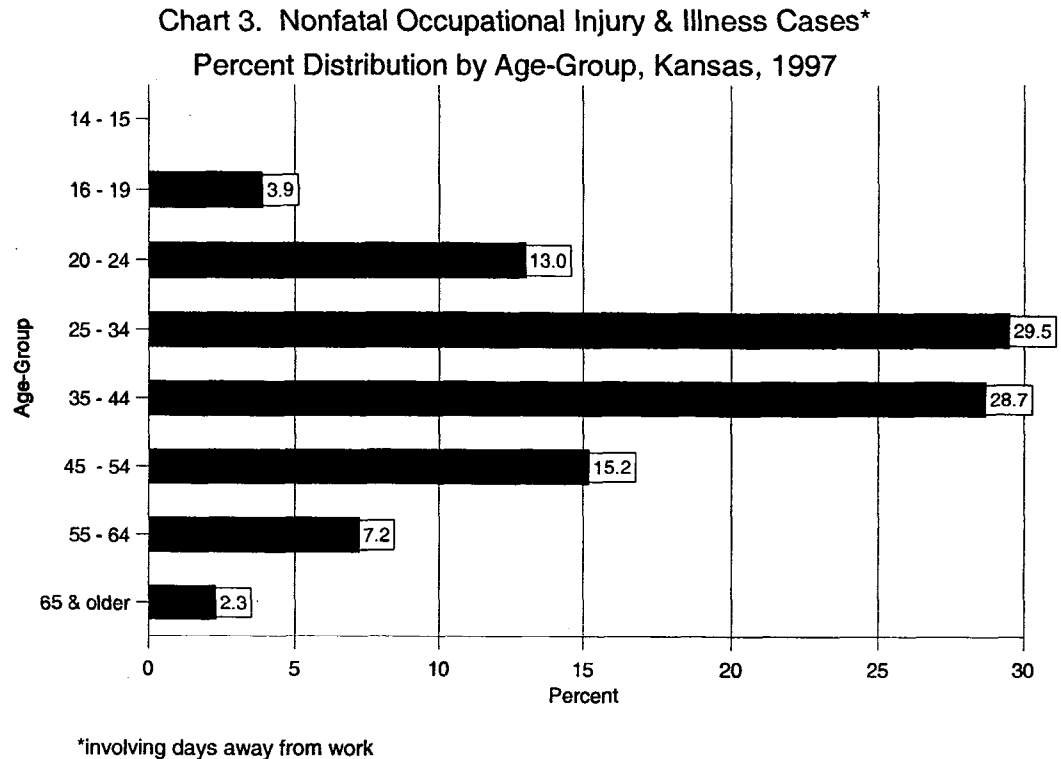
- Of the workers suffering injuries & illnesses involving days away from work for whom length of service is known, 43% had less than one year of service with their employer at the time of the injury or illness. The majority of these cases can likely be attributed to inexperience. Experienced workers, however, are certainly not immune to incurring occupational injuries and illnesses. One in five (21%) of workers for whom length of service is known, had over five years of service with their employer. (Chart 2, Table 1, Table 2)



\*involving days away from work

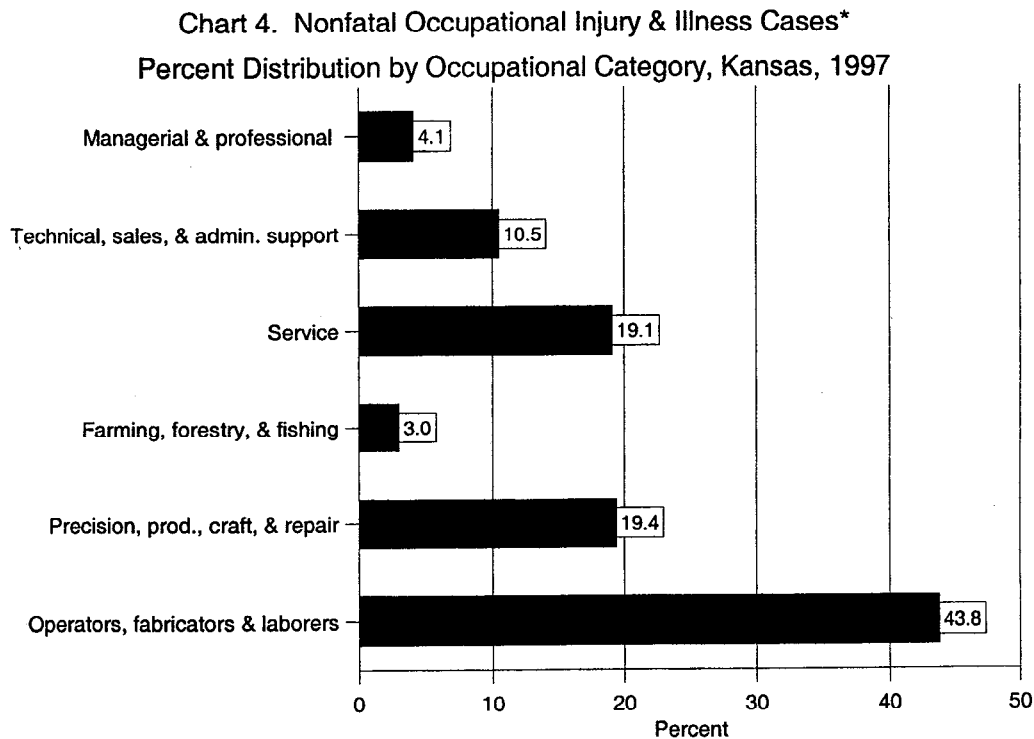
- A lack of experience appears to be most problematic in the agriculture, forestry, and fishing industry. Over half (51.6%) of the injuries and illnesses occurring in this industry were to workers with less than three months service with their employer at the time of the injury or illness. (Table 2)

- The majority of injuries and illnesses involving days away from work occurred to workers in the 25-34 age group with 5,475 followed closely by the 35-44 age group with 5,320. Together these two age groups accounted for 58% of all injuries and illnesses with days away from work.(Chart 3, Table 1)



- When looking at the percent distribution of injuries and illnesses by age-group within industry divisions, the agriculture, forestry, and fishing industry had the overwhelming percent of workers in the 20 to 24 age-group with 40.1%. (Table 2)

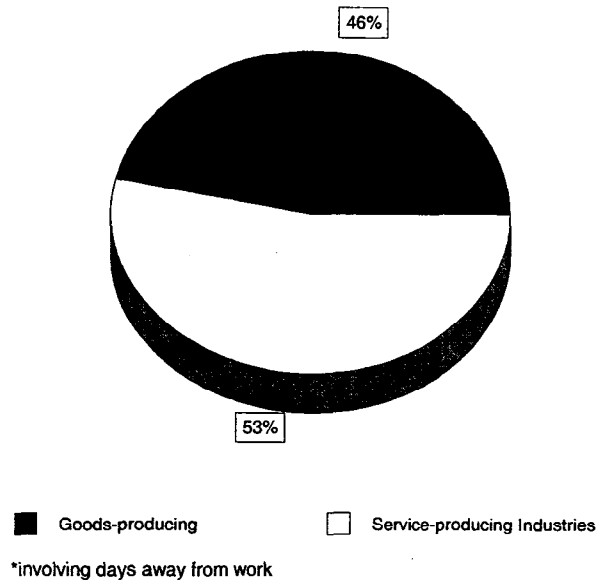
- Operators, fabricators, and laborers was the occupational category with the highest number of occupational injuries and illnesses involving days away from work with 8,121, or 43.8%. This group includes truck drivers, nonconstruction laborers, and assemblers. (Chart 4, Table 1, Table 2)



\*involving days away from work

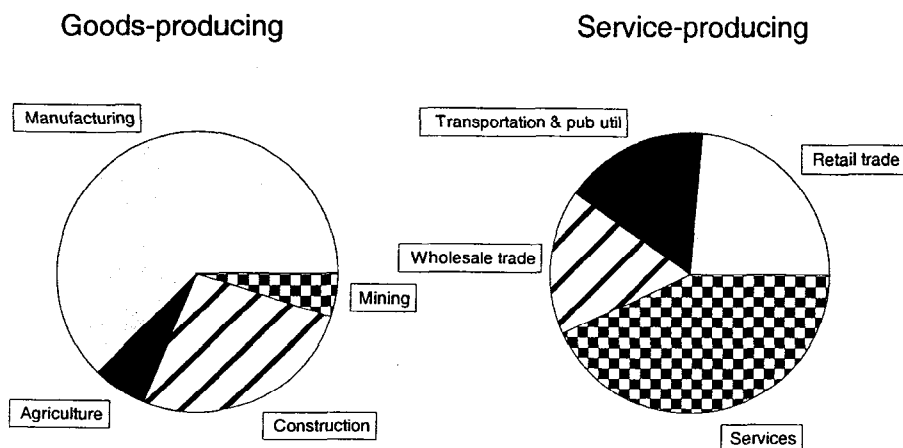
- Goods-producing industries accounted for 45.7% of the nonfatal occupational injuries and illnesses involving days away from work. Among the occupations within these industries having a high number of cases are construction laborers (742), assemblers (586), carpenters (399) and welders and cutters (297). (Chart 5, Table 3)
- Service-producing industries accounted for the remaining 54.3% of the nonfatal occupational injuries and illnesses involving days away from work. Among the occupations within these industries having a high number of cases are nursing aides and orderlies (1,518), truck drivers (900), freight, stock & materials handlers n.e.c. (563), and nonconstruction laborers (476). (Chart 5, Table 3)

Chart 5. Nonfatal Occupational Injury and Illness Cases\*  
Percent Distribution by Industry Category, Kansas, 1997



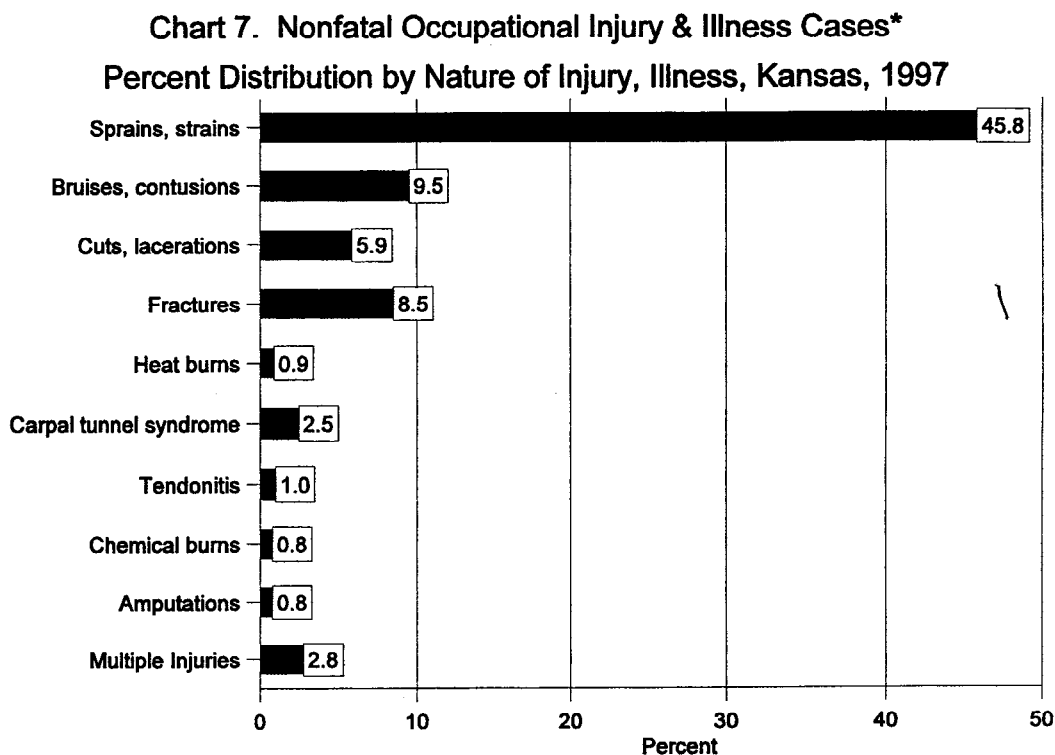
- As would be expected, manufacturing dominated the goods-producing industries with 62.3% of injury and illness cases occurring in this industry. Also as would be expected, service industries dominated the service-producing industries with 43.2% of injury and illness cases occurring in this industry. Retail trade accounted for another quarter (23.7%). (Chart 6).

Chart 6. Nonfatal Occupational Injury & Illness Cases \*  
Percent Distribution by Industry by Category, Kansas, 1997



\*involving days away from work

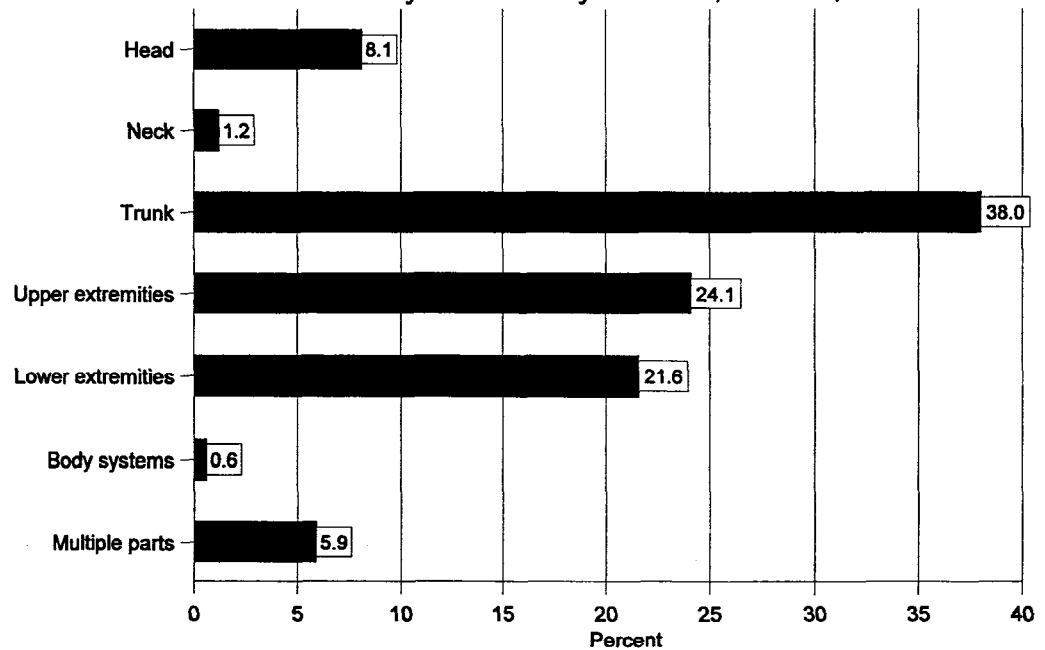
- Sprains and strains were responsible for nearly half the occupational injury & illness cases involving days away from work (45.8%). Bruises and contusions was the nature category with the next highest number of injury cases and represented a distant 9.5% of injuries involving days away from work. Fractures were third with 8.5%. (Chart 7, Table 5)



\*involving days away from work

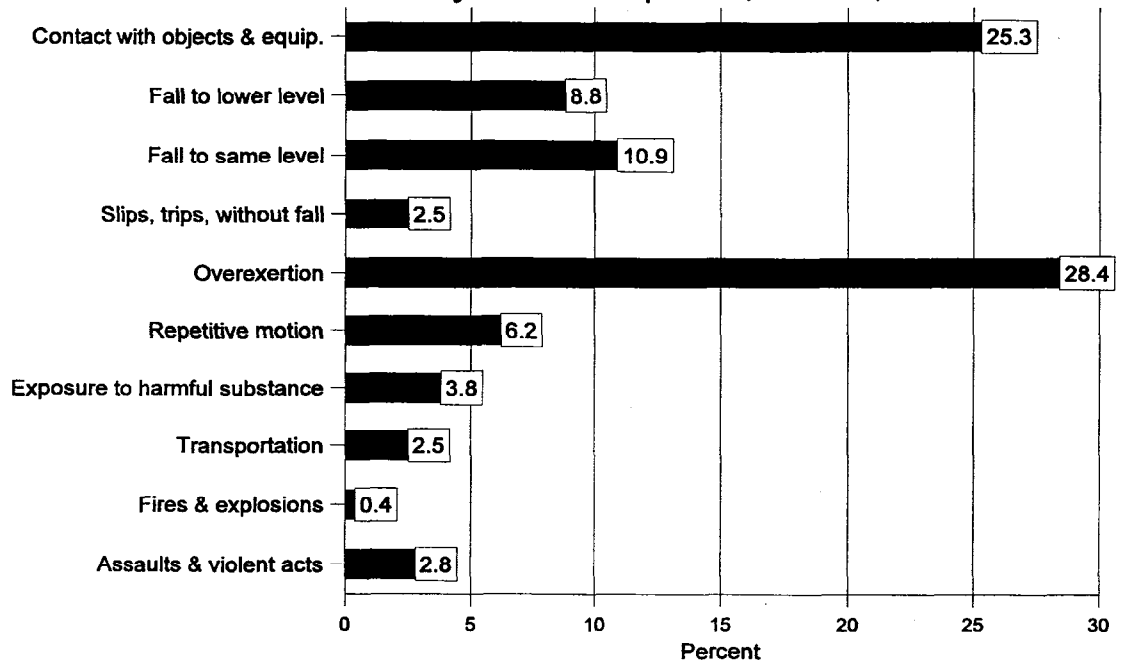
- As would be expected, with such a large number of sprains and strains, the trunk was the part of body most often affected as was the case in 7,056 injuries, or 38% of injury cases. Nearly two-thirds (63.4%) of the trunk injuries (4,474) involved the back and 1,211 involved the shoulder. Upper extremities were affected in approximately one out of four (24.1%) injury and illness cases involving days away from work. (Chart 8, Table 5)
- Two event categories accounted for over half (53.7%) the injury and illness cases involving days away from work. Overexertion caused over one fourth (28.4%) of the injuries involving days away from work and contact with objects and equipment was responsible for another quarter. Of the 5,275 cases of overexertion, 3,168 were due to lifting. Falls accounted for nearly one out of 5 injuries (19.7%). Of the 3,746 falls, 2,030 (54.2%) were falls to the same level. (Chart 9, Table 4, Table 5)

**Chart 8. Nonfatal Occupational Injury & Illness Cases\***  
**Percent Distribution by Part of Body Affected, Kansas, 1997**



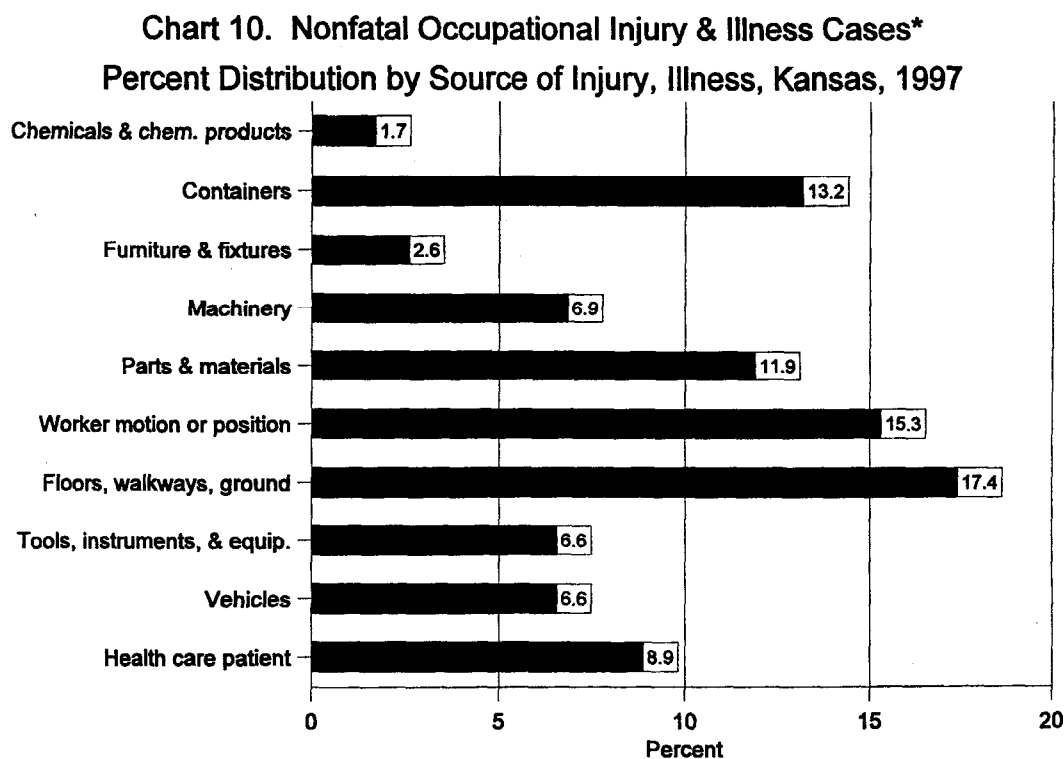
\*Involving days away from work

**Chart 9. Nonfatal Occupational Injury & Illness Cases\***  
**Percent Distribution by Event or Exposure, Kansas, 1997**



\*involving days away from work

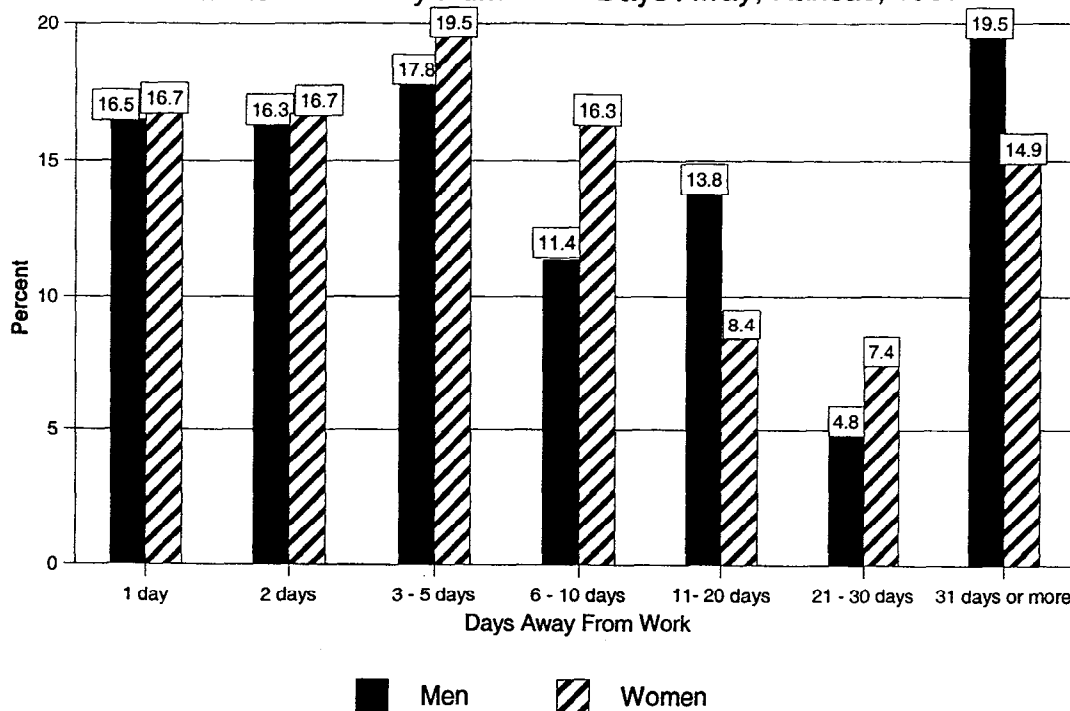
- A variety of sources were responsible for the occupational injury and illness cases involving days away from work. Floors, walkways, and ground surfaces were the source of injury in 17.4% of the cases, worker motion or position in 15.3%, containers in 13.2% and parts and materials in 11.9%. Together these sources accounted for 57.8% of injury and illness cases involving days away from work. (Chart 10, Table 5)



\*involving days away from work

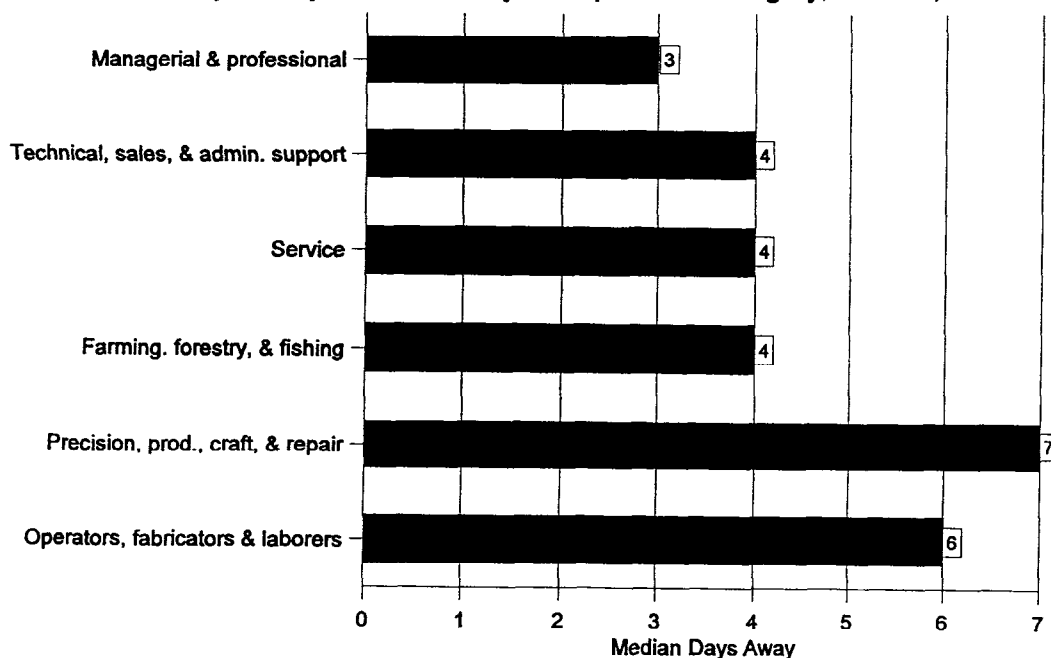
- Experience with the data has shown floors, walkways, and ground surfaces to be the major source of injury in falls to the same level, worker motion or position to be the major source involved in repetitive motion events, and containers to be the source involved in the majority of overexertion in lifting injuries.
- While there were no major distinctions between men and women regarding the number of days away from work due to work related injuries and illnesses, more men were represented in longer lengths of days away than were women suggesting that on the whole, men sustained injuries and illnesses that were more severe than did women. For men, the median number of days away from work was five, and for women, 4. (Chart 11, Table 7)

Chart 11. Nonfatal Occupational Injury & Illness Cases\*  
Percent Distribution by Number of Days Away, Kansas, 1997



\*involving days away from work

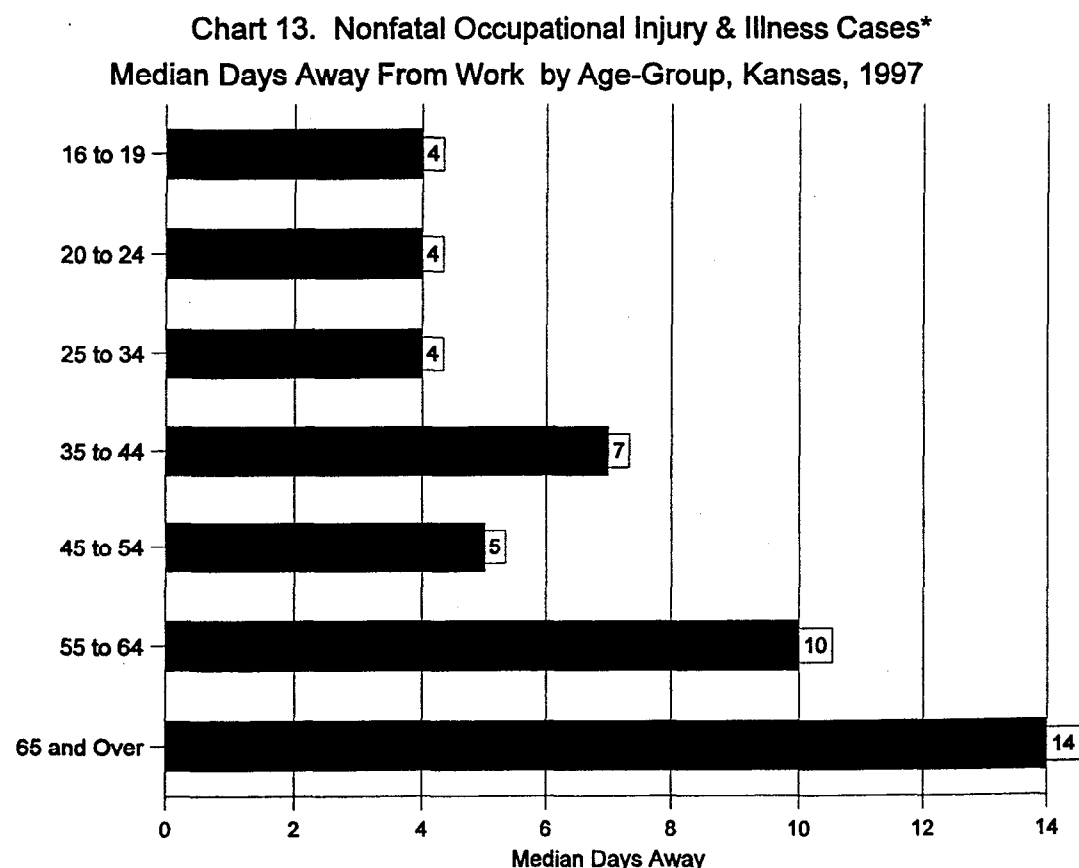
Chart 12. Nonfatal Occupational Injury & Illness Cases\*  
Median Days Away From Work by Occupational Category, Kansas, 1997



\*involving days away from work



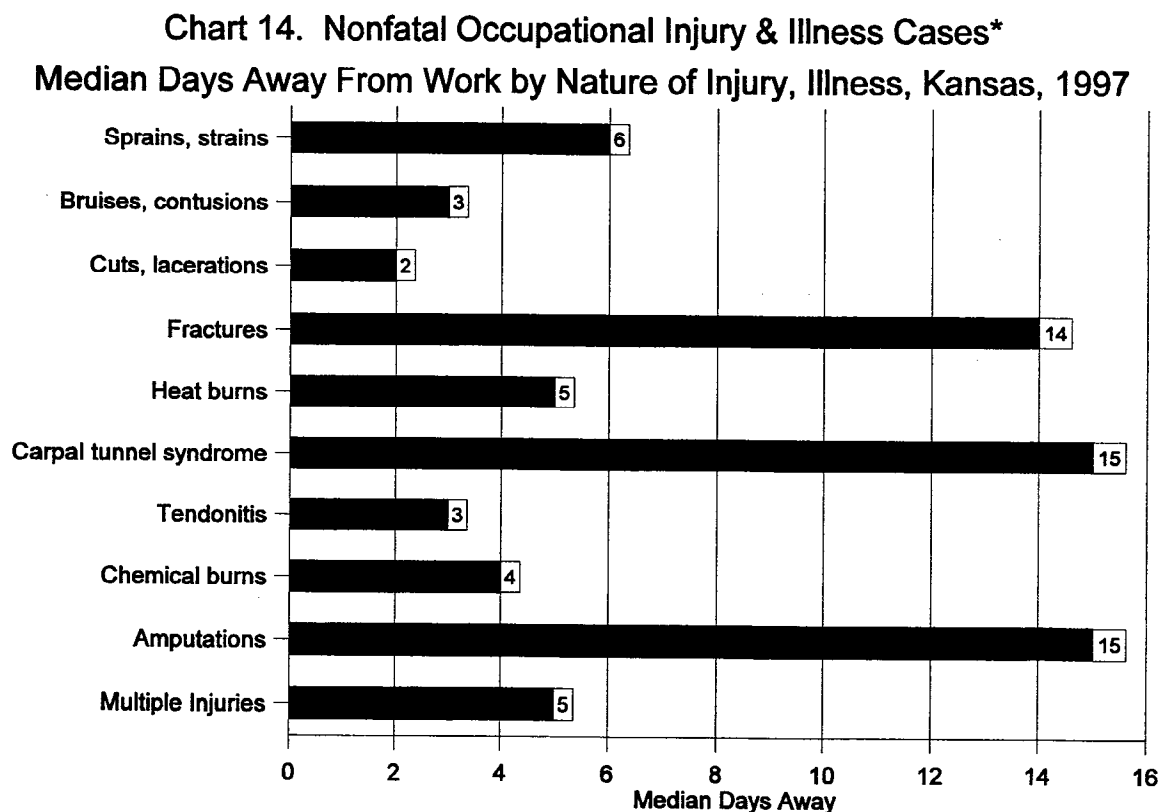
- Median days away from work, the key measure of severity, designates the point at which half the cases involved more days away and half involved fewer days away. The occupational category with the highest median days away was precision production, craft and repair with 7. (Chart 12, Table 7)
- Among the specific occupations with high median days away from work are truck drivers (14), licensed practical nurses (14), traffic, shipping and receiving clerks (14), precision assemblers, metal (13), bus, truck and stationary engine mechanics (12), plumbers, pipefitters, and steamfitters (12), assemblers (10), and garage and service station related occupations (10). (Table 8)



\*involving days away from work

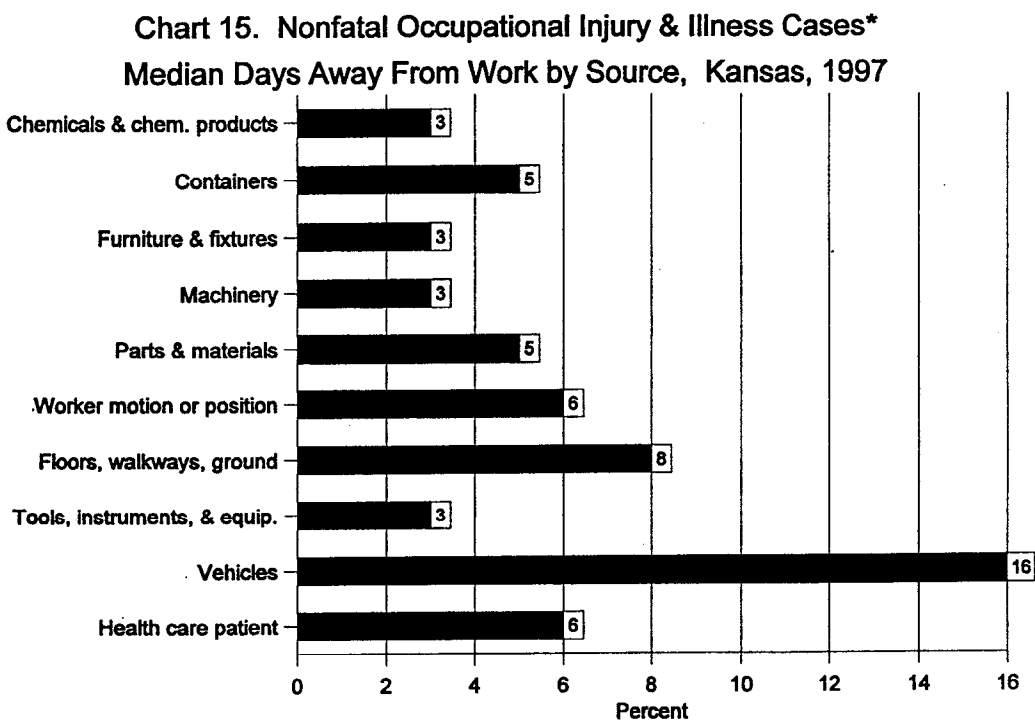
- Employees 55 years and older had higher median days away from work than younger age-groups. Employees 55 to 64 had a median of 10 days away and those 65 and over had a median of 14. (Chart 13, Table 7)
- Illustrating this further, 37.4% of all injuries and illnesses occurring to employees 65 and over resulted in 31 days or more away from work. (Table 7)

- Carpal tunnel syndrome and amputations were responsible for the longest length of time away from work with a median number of days away of 15. This was followed closely by fractures with a median of 14 days away. (Chart 14, Table 9)
- Injuries and illnesses affecting the knee had the highest median days away from work with 20. The shoulder had the next highest with 9. (Table 9)



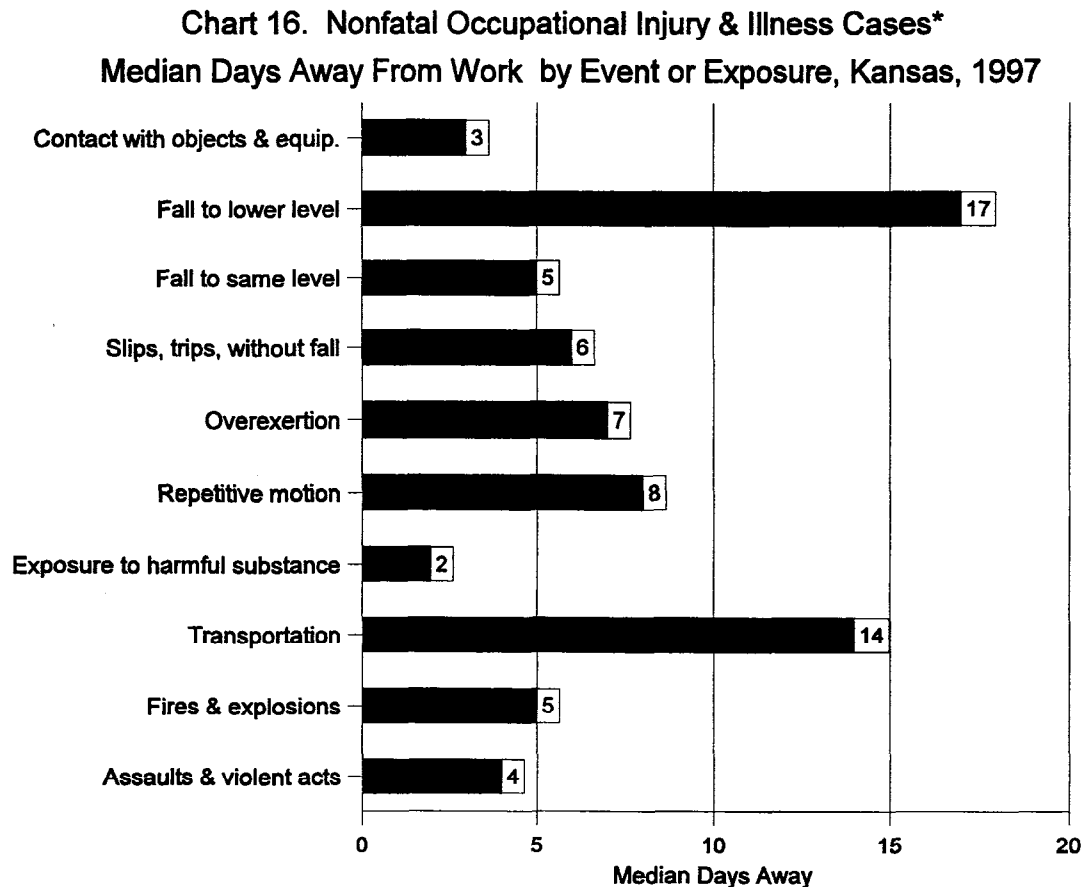
\*involving days away from work

- Of all sources of injuries and illnesses involving days away from work, vehicles accounted for the highest median days away (16). (Chart 15, Table 9)
- Vehicles has such a significantly higher median days away than all other sources because 44.6% of all injuries and illnesses with vehicles as the source involved 21 or more days away from work. (Table 9)
- Floors, walkways, and ground surfaces had the second highest median days away with a distant 8. (Chart 15, Table 9)
- Over one-fourth (26.3%) of injuries and illnesses with worker motion or position as the source were severe enough to result in 31 days or more away from work. (Table 9)



\*involving days away from work

- Falls to a lower level was the event having the highest median days away from work with 17. Transportation accidents had the next highest with a median of 14 days away from work. (Chart 16, Table 9)



\*involving days away from work

- The industry with the highest median days away from work was transportation and public utilities with 12. (Table 10)
- The industry with the highest distribution of injuries and illnesses resulting in only one day away from work was retail trade in which one fourth (25.8%) of all injuries and illnesses occurring on the job resulted in just a day away. (Table 10)
- Two industries in Kansas having the highest distribution of work related injuries & illness involving 31 days or more away from work were mining with 31% and construction with 29.4%. (Table 10)

**Table 1. Number of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected worker characteristics and industry division, 1997**

Characteristic	Private industry <sup>2</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>2</sup>	Mining <sup>3</sup>	Construction	Manufacturing	Transportation and public utilities <sup>3</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total	18,547	565	404	2,233	5,283	1,632	1,588	2,298	--	4,197
Sex:										
Men	11,952	502	398	2,177	4,008	1,127	1,132	1,475	--	876
Women	6,491	--	--	56	1,269	407	456	822	--	3,320
Age:										
14 to 15	--	--	--	--	--	--	--	--	--	--
16 to 19	716	--	10	122	167	42	--	192	--	148
20 to 24	2,414	226	55	289	837	164	214	212	--	409
25 to 34	5,475	165	133	584	1,427	563	486	726	--	1,157
35 to 44	5,320	--	110	778	1,727	504	213	567	--	1,308
45 to 54	2,828	--	73	275	726	258	455	314	--	612
55 to 64	1,341	--	22	185	360	81	--	200	--	361
65 and over	429	--	--	--	35	--	--	87	--	201
Occupation:										
Managerial and professional specialty	758	--	--	--	45	--	--	71	--	515
Technical, sales, and administrative support	1,942	--	--	--	216	111	164	533	--	656
Service	3,538	--	--	--	102	--	256	586	--	2,522
Farming, forestry, and fishing	554	491	--	--	--	--	--	--	--	--
Precision production, craft, and repair	3,606	--	231	1,124	1,434	131	339	233	--	102
Operators, fabricators, and laborers	8,121	--	169	1,069	3,460	1,344	771	856	--	388
Length of service with employer:										
Less than 3 months	3,197	292	56	547	758	267	208	310	--	707
3 to 11 months	3,609	--	116	466	960	183	369	335	--	1,055
1 to 5 years	5,686	--	73	770	1,326	149	599	909	--	1,568
More than 5 years	3,314	--	96	347	1,257	273	323	271	--	597
Not reported	2,742	--	64	104	982	759	--	472	--	270
Race or ethnic origin:										
White, non-Hispanic	11,493	377	208	1,721	2,996	628	882	1,245	--	3,286
Black, non-Hispanic	854	--	--	60	202	41	--	62	--	202
Hispanic	974	--	45	156	213	--	--	185	--	159
Asian or Pacific Islander	110	--	--	--	56	--	--	--	--	--
American Indian or Alaskan Native	112	--	--	--	62	--	--	--	--	--
Not reported	5,004	--	151	271	1,753	955	534	803	--	517

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>2</sup> Excludes farms with fewer than 11 employees.

<sup>3</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

Table 2. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected worker characteristics and industry division, 1997

Characteristic	Private industry <sup>2</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>2</sup>	Mining <sup>3</sup>	Construction	Manufacturing	Transportation and public utilities <sup>3</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total [18,547 cases]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	--	100.0
Sex:										
Men	64.4	88.8	98.5	97.5	75.9	69.1	71.3	64.2	--	20.9
Women	35.0	--	--	2.5	24.0	25.0	28.7	35.8	--	79.1
Age:										
14 to 15	--	--	--	--	--	--	--	--	--	--
16 to 19	3.9	--	2.6	5.5	3.2	2.6	--	8.3	--	3.5
20 to 24	13.0	40.1	13.6	12.9	15.8	10.0	13.5	9.2	--	9.7
25 to 34	29.5	29.3	32.9	26.1	27.0	34.5	30.6	31.6	--	27.6
35 to 44	28.7	--	27.1	34.8	32.7	30.9	13.4	24.7	--	31.2
45 to 54	15.2	--	18.0	12.3	13.7	15.8	28.7	13.6	--	14.6
55 to 64	7.2	--	5.5	8.3	6.8	4.9	--	8.7	--	8.6
65 and over	2.3	--	--	--	0.7	--	--	3.8	--	4.8
Occupation:										
Managerial and professional specialty	4.1	--	--	--	0.9	--	--	3.1	--	12.3
Technical, sales, and administrative support	10.5	--	--	--	4.1	6.8	10.3	23.2	--	15.6
Service	19.1	--	--	--	1.9	--	16.1	25.5	--	60.1
Farming, forestry, and fishing	3.0	86.9	--	--	--	--	--	--	--	--
Precision production, craft, and repair	19.4	--	57.2	50.3	27.1	8.0	21.4	10.2	--	2.4
Operators, fabricators, and laborers	43.8	--	41.8	47.9	65.5	82.4	48.6	37.2	--	9.2
Length of service with employer:										
Less than 3 months	17.2	51.6	13.7	24.5	14.4	16.4	13.1	13.5	--	16.8
3 to 11 months	19.5	--	28.8	20.8	18.2	11.2	23.2	14.6	--	25.1
1 to 5 years	30.7	--	18.0	34.5	25.1	9.1	37.7	39.6	--	37.4
More than 5 years	17.9	--	23.7	15.5	23.8	16.8	20.4	11.8	--	14.2
Not reported	14.8	--	15.8	4.7	18.6	46.5	--	20.5	--	6.4
Race or ethnic origin:										
White, non-Hispanic	62.0	66.7	51.5	77.1	56.7	38.5	55.6	54.2	--	78.3
Black, non-Hispanic	4.6	--	--	2.7	3.8	2.5	--	2.7	--	4.8
Hispanic	5.3	--	11.1	7.0	4.0	--	--	8.0	--	3.8
Asian or Pacific Islander	0.6	--	--	--	1.1	--	--	--	--	--
American Indian or Alaskan Native	0.6	--	--	--	1.2	--	--	--	--	--
Not reported	27.0	--	37.4	12.1	33.2	58.5	33.6	34.9	--	12.3

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>2</sup> Excludes farms with fewer than 11 employees.

<sup>3</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

Table 3. Number of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected worker occupations and industry division, 1997

Kansas—private industry										
Occupation	Private industry <sup>2</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>2</sup>	Mining <sup>3</sup>	Construction	Manufacturing	Transportation and public utilities <sup>3</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total	18,547	565	404	2,233	5,283	1,632	1,588	2,298	--	4,197
Nursing aides, orderlies, and attendants	1,520	--	--	--	--	--	--	--	--	1,518
Truck drivers	1,390	--	14	52	361	586	220	94	--	--
Laborers, nonconstruction	897	--	53	--	316	36	249	191	--	--
Construction laborers	742	--	--	742	--	--	--	--	--	--
Assemblers	618	--	--	--	586	--	--	--	--	--
Janitors and cleaners	414	--	--	--	102	--	--	107	--	149
Carpenters	409	--	--	356	43	--	--	--	--	--
Cooks	384	--	--	--	--	--	--	152	--	224
Stock handlers and baggers	371	--	--	--	38	--	120	213	--	--
Welders and cutters	362	--	7	--	290	--	--	--	--	--
Registered nurses	357	--	--	--	--	--	--	--	--	357
Kitchen workers, food preparation	335	--	--	--	--	--	256	59	--	--
Farm workers	315	315	--	--	--	--	--	--	--	--
Butchers and meat cutters	305	--	--	--	219	--	--	--	--	--
Sales workers, other commodities	283	--	--	--	--	--	--	230	--	53
Machinists	229	--	--	--	222	--	--	--	--	--
Licensed practical nurses	227	--	--	--	--	--	--	--	--	227
Miscellaneous food preparation occupations	208	--	--	--	--	--	--	69	--	134
Precision assemblers, metal	188	--	--	--	188	--	--	--	--	--
Bank tellers	179	--	--	--	--	--	--	--	--	--
Automobile mechanics	169	--	--	--	--	--	--	142	--	--
Driver-sales workers	158	--	--	--	--	--	142	--	--	--
Traffic, shipping, and receiving clerks	157	--	--	--	99	--	--	--	--	--
Supervisors, production occupations	154	--	--	--	118	--	--	18	--	--
Bus, truck, and stationary engine mechanics	152	--	--	--	--	--	--	--	--	--
Maids and housemen	150	--	--	--	--	--	--	--	--	150
Plumbers, pipefitters, and steamfitters	147	--	--	98	42	--	--	--	--	--
Health aides, exc. nursing	138	--	--	--	--	--	--	--	--	138
Printing press operators	135	--	--	--	135	--	--	--	--	--
Groundskeepers and gardeners, exc. farm	130	--	--	--	--	--	--	--	--	--
Garage and service station related occupations	129	--	--	--	--	--	--	124	--	--

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>2</sup> Excludes farms with fewer than 11 employees.

<sup>3</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

Table 4. Number of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected injury or illness characteristics and industry division, 1997

Characteristic	Kansas-private industry									
	Private industry <sup>2</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>2</sup>	Mining <sup>3</sup>	Construction	Manufacturing	Transportation and public utilities <sup>3</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total	18,547	565	404	2,233	5,283	1,632	1,588	2,298	--	4,197
Nature of injury, illness:										
Sprains, strains	8,491	210	135	887	1,797	999	628	1,242	--	2,360
Bruises, contusions	1,759	--	53	147	586	162	--	309	--	303
Cuts, lacerations	1,100	--	9	152	317	30	334	162	--	83
Fractures	1,577	--	67	298	460	108	--	170	--	324
Heat burns	173	--	--	--	61	--	--	--	--	58
Carpal tunnel syndrome	470	--	--	--	212	--	128	--	--	--
Tendonitis	182	--	--	--	79	--	--	--	--	--
Chemical burns	149	--	--	--	63	--	--	--	--	--
Amputations	149	--	--	--	64	--	--	--	--	--
Multiple injuries	520	--	29	70	109	63	--	83	--	120
Part of body affected:										
Head	1,504	--	34	199	612	63	--	142	--	284
Eye	645	--	25	57	337	28	--	45	--	96
Neck	224	--	--	--	94	--	--	--	--	65
Trunk	7,056	203	172	581	1,611	685	483	1,002	--	2,070
Shoulder	1,211	--	10	76	326	139	--	132	--	445
Back	4,474	150	117	409	896	411	264	700	--	1,317
Upper extremities	4,467	--	126	528	1,684	275	579	449	--	681
Wrist	1,327	--	11	106	468	100	179	188	--	178
Hand, except finger	372	--	14	--	201	32	--	53	--	--
Finger	1,585	--	74	136	562	78	350	104	--	266
Lower extremities	3,999	--	55	708	898	466	406	496	--	816
Knee	1,994	--	16	306	470	297	226	192	--	387
Foot, except toe	485	--	--	130	165	43	--	--	--	82
Toe	225	--	15	--	40	27	--	49	--	--
Body systems	117	--	--	--	18	--	--	--	--	57
Multiple parts	1,087	--	11	174	360	96	--	177	--	176

See footnotes at end of table.



**Table 4. Number of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected injury or illness characteristics and industry division, 1997 — Continued**

Kansas--private industry										
Characteristic	Private industry <sup>2</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>2</sup>	Mining <sup>3</sup>	Construction	Manufacturing	Transportation and public utilities <sup>3</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Source of injury, illness:										
Chemicals and chemical products	309	--	--	48	114	--	--	--	--	112
Containers	2,447	--	24	--	469	493	345	443	--	426
Furniture and fixtures	488	--	--	--	124	51	--	156	--	131
Machinery	1,286	--	44	215	421	32	357	123	--	63
Parts and materials	2,203	--	87	474	876	117	192	223	--	167
Worker motion or position	2,829	--	31	194	1,260	224	340	340	--	359
Floors, walkways, ground surfaces	3,229	270	27	652	803	149	150	622	--	526
Tools, instruments, and equipment	1,225	--	88	149	462	57	--	138	--	259
Vehicles	1,223	--	36	101	252	422	--	133	--	175
Health care patient	1,653	--	--	--	--	--	--	--	--	1,652
Event or exposure:										
Contact with objects and equipment	4,684	188	181	627	1,679	415	516	477	--	596
Struck by object	2,081	--	85	256	706	233	130	266	--	279
Struck against object	1,250	--	15	132	393	110	330	104	--	148
Caught in equipment or object	863	--	66	162	385	38	--	56	--	115
Fall to lower level	1,636	195	19	404	331	261	120	162	--	135
Fall to same level	2,030	--	8	244	567	96	--	572	--	422
Slips, trips, loss of balance--without fall	466	--	--	66	143	--	110	45	--	81
Overexertion	5,275	--	113	415	1,060	465	523	611	--	1,823
Overexertion in lifting	3,168	--	64	122	475	277	228	424	--	1,352
Repetitive motion	1,150	--	--	--	708	43	166	62	--	77
Exposure to harmful substances	698	--	12	112	266	60	--	--	--	190
Transportation accidents	457	--	33	106	77	69	--	51	--	93
Fires and explosions	79	--	--	--	--	--	--	--	--	--
Assaults and violent acts by person	521	--	--	--	--	--	--	--	--	492

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>2</sup> Excludes farms with fewer than 11 employees.

<sup>3</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

Table 5. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected injury or illness characteristics and industry division, 1997

Kansas--private industry										
Characteristic	Private industry <sup>2</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>2</sup>	Mining <sup>3</sup>	Construction	Manufacturing	Transportation and public utilities <sup>3</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total [18,547 cases]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	--	100.0
Nature of injury, illness:										
Sprains, strains	45.8	37.1	33.5	39.7	34.0	61.2	39.5	54.1	--	56.2
Bruises, contusions	9.5	--	13.1	6.6	11.1	9.9	--	13.4	--	7.2
Cuts, lacerations	5.9	--	2.2	6.8	6.0	1.8	21.0	7.0	--	2.0
Fractures	8.5	--	16.7	13.3	8.7	6.6	--	7.4	--	7.7
Heat burns	0.9	--	--	--	1.1	--	--	--	--	1.4
Carpal tunnel syndrome	2.5	--	--	--	4.0	--	8.0	--	--	--
Tendonitis	1.0	--	--	--	1.5	--	--	--	--	--
Chemical burns	0.8	--	--	--	1.2	--	--	--	--	--
Amputations	0.8	--	--	--	1.2	--	--	--	--	--
Multiple injuries	2.8	--	7.2	3.1	2.1	3.9	--	3.6	--	2.9
Part of body affected:										
Head	8.1	--	8.3	8.9	11.6	3.9	--	6.2	--	6.8
Eye	3.5	--	6.1	2.5	6.4	1.7	--	1.9	--	2.3
Neck	1.2	--	--	--	1.8	--	--	--	--	1.6
Trunk	38.0	35.9	42.6	26.0	30.5	42.0	30.4	43.6	--	49.3
Shoulder	6.5	--	2.5	3.4	6.2	8.5	--	5.7	--	10.6
Back	24.1	26.5	28.8	18.3	17.0	25.2	16.6	30.5	--	31.4
Upper extremities	24.1	--	31.1	23.6	31.9	16.8	36.4	19.6	--	16.2
Wrist	7.2	--	2.8	4.8	8.9	6.1	11.3	8.2	--	4.2
Hand, except finger	2.0	--	3.6	--	3.8	1.9	--	2.3	--	--
Finger	8.5	--	18.4	6.1	10.6	4.8	22.0	4.5	--	6.3
Lower extremities	21.6	--	13.5	31.7	17.0	28.6	25.5	21.6	--	19.4
Knee	10.8	--	4.0	13.7	8.9	18.2	14.3	8.4	--	9.2
Foot, except toe	2.6	--	--	5.8	3.1	2.6	--	--	--	2.0
Toe	1.2	--	3.6	--	0.7	1.7	--	2.1	--	--
Body systems	0.6	--	--	--	0.3	--	--	--	--	1.4
Multiple parts	5.9	--	2.7	7.8	6.8	5.9	--	7.7	--	4.2

See footnotes at end of table.

**Table 5. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected injury or illness characteristics and industry division, 1997 — Continued**

Kansas—private industry										
Characteristic	Private industry <sup>2</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>2</sup>	Mining <sup>3</sup>	Construction	Manufacturing	Transportation and public utilities <sup>3</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Source of injury, illness:										
Chemicals and chemical products	1.7	--	--	2.1	2.2	--	--	--	--	2.7
Containers	13.2	--	6.0	--	8.9	30.2	21.7	19.3	--	10.2
Furniture and fixtures	2.6	--	--	--	2.4	3.1	--	6.8	--	3.1
Machinery	6.9	--	10.8	9.6	8.0	2.0	22.4	5.3	--	1.5
Parts and materials	11.9	--	21.6	21.2	16.6	7.2	12.1	9.7	--	4.0
Worker motion or position	15.3	--	7.8	8.7	23.9	13.7	21.4	14.8	--	8.6
Floors, walkways, ground surfaces	17.4	47.8	6.8	29.2	15.2	9.1	9.5	27.1	--	12.5
Tools, instruments, and equipment	6.6	--	21.8	6.7	8.7	3.5	--	6.0	--	6.2
Vehicles	6.6	--	8.8	4.5	4.8	25.9	--	5.8	--	4.2
Health care patient	8.9	--	--	--	--	--	--	--	--	39.4
Event or exposure:										
Contact with objects and equipment	25.3	33.2	44.7	28.1	31.8	25.4	32.5	20.8	--	14.2
Struck by object	11.2	--	21.0	11.5	13.4	14.3	8.2	11.6	--	6.7
Struck against object	6.7	--	3.8	5.9	7.4	6.7	20.8	4.5	--	3.5
Caught in equipment or object	4.7	--	16.4	7.2	7.3	2.3	--	2.4	--	2.7
Fall to lower level	8.8	34.4	4.8	18.1	6.3	16.0	7.5	7.0	--	3.2
Fall to same level	10.9	--	2.0	10.9	10.7	5.9	--	24.9	--	10.1
Slips, trips, loss of balance--without fall	2.5	--	--	2.9	2.7	--	6.9	2.0	--	1.9
Overexertion	28.4	--	28.0	18.6	20.1	28.5	33.0	26.6	--	43.4
Overexertion in lifting	17.1	--	15.9	5.4	9.0	17.0	14.4	18.4	--	32.2
Repetitive motion	6.2	--	--	--	13.4	2.6	10.5	2.7	--	1.8
Exposure to harmful substances	3.8	--	3.0	5.0	5.0	3.7	--	--	--	4.5
Transportation accidents	2.5	--	8.1	4.8	1.5	4.2	--	2.2	--	2.2
Fires and explosions	0.4	--	--	--	--	--	--	--	--	--
Assaults and violent acts by person	2.8	--	--	--	--	--	--	--	--	11.7

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>2</sup> Excludes farms with fewer than 11 employees.

<sup>3</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

**Table 6. Incidence rates<sup>1</sup> for nonfatal occupational injuries and illnesses involving days away from work<sup>2</sup> per 10,000 full-time workers for selected characteristics and industry division, 1997**

Kansas-private industry										
Characteristic	Private industry <sup>3</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>3</sup>	Mining <sup>4</sup>	Construction	Manufacturing	Transportation and public utilities <sup>4</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Total [18,547 cases]	212.8	531.8	472.3	398.4	251.4	245.7	204.0	134.1	--	191.8
Nature of injury, illness:										
Sprains, strains	97.4	197.2	158.2	158.3	85.5	150.4	80.7	72.5	--	107.8
Bruises, contusions	20.2	--	61.9	26.2	27.9	24.4	--	18.0	--	13.9
Cuts, lacerations	12.6	--	10.4	27.1	15.1	4.5	42.9	9.4	--	3.8
Fractures	18.1	--	78.8	53.1	21.9	16.2	--	10.0	--	14.8
Heat burns	2.0	--	--	--	2.9	--	--	--	--	2.7
Carpal tunnel syndrome	5.4	--	--	--	10.1	--	16.4	--	--	--
Tendonitis	2.1	--	--	--	3.8	--	--	--	--	--
Chemical burns	1.7	--	--	--	3.0	--	--	--	--	--
Amputations	1.7	--	--	--	3.1	--	--	--	--	--
Multiple injuries	6.0	--	33.9	12.5	5.2	9.5	--	4.8	--	5.5
Part of body affected:										
Head	17.3	--	39.3	35.5	29.1	9.6	--	8.3	--	13.0
Eye	7.4	--	28.6	10.1	16.0	4.3	--	2.6	--	4.4
Neck	2.6	--	--	--	4.5	--	--	--	--	3.0
Trunk	81.0	190.8	201.3	103.7	76.7	103.1	62.0	58.5	--	94.6
Shoulder	13.9	--	12.0	13.5	15.5	20.9	--	7.7	--	20.4
Back	51.3	140.9	136.1	73.0	42.6	61.9	34.0	40.9	--	60.2
Upper extremities	51.3	--	147.1	94.1	80.1	41.3	74.3	26.2	--	31.1
Wrist	15.2	--	13.3	19.0	22.3	15.1	23.0	11.0	--	8.1
Hand, except finger	4.3	--	16.8	--	9.6	4.8	--	3.1	--	--
Finger	18.2	--	86.8	24.3	26.8	11.8	44.9	6.1	--	12.2
Lower extremities	45.9	--	63.8	126.4	42.8	70.2	52.1	29.0	--	37.3
Knee	22.9	--	18.9	54.6	22.4	44.8	29.1	11.2	--	17.7
Foot, except toe	5.6	--	--	23.2	7.8	6.4	--	--	--	3.8
Toe	2.6	--	17.1	--	1.9	4.1	--	2.8	--	--
Body systems	1.3	--	--	--	--	--	--	--	--	2.6
Multiple parts	12.5	--	12.8	31.1	17.2	14.5	--	10.4	--	8.0

See footnotes at end of table.

**Table 6. Incidence rates<sup>1</sup> for nonfatal occupational injuries and illnesses involving days away from work<sup>2</sup> per 10,000 full-time workers for selected characteristics and industry division, 1997 — Continued**

Kansas—private industry										
Characteristic	Private industry <sup>3</sup>	Goods producing				Service producing				
		Agriculture, forestry, and fishing <sup>3</sup>	Mining <sup>4</sup>	Construction	Manufacturing	Transportation and public utilities <sup>4</sup>	Wholesale trade	Retail trade	Finance, insurance, and real estate	Services
Source of injury, illness:										
Chemicals and chemical products	3.5	--	--	8.5	5.4	--	--	--	--	5.1
Containers	28.1	--	28.4	--	22.3	74.2	44.3	25.9	--	19.5
Furniture and fixtures	5.6	--	--	--	5.9	7.6	--	9.1	--	6.0
Machinery	14.8	--	51.2	38.3	20.0	4.8	45.8	7.2	--	2.9
Parts and materials	25.3	--	101.8	84.7	41.7	17.7	24.7	13.0	--	7.6
Worker motion or position	32.5	--	36.7	34.6	60.0	33.7	43.6	19.9	--	16.4
Floors, walkways, ground surfaces	37.1	254.4	32.1	116.4	38.2	22.4	19.3	36.3	--	24.0
Tools, instruments, and equipment	14.1	--	103.0	26.6	22.0	8.7	--	8.1	--	11.9
Vehicles	14.0	--	41.7	18.0	12.0	63.5	--	7.7	--	8.0
Health care patient	19.0	--	--	--	--	--	--	--	--	75.5
Event or exposure:										
Contact with objects and equipment	53.8	176.5	211.0	111.8	79.9	62.4	66.3	27.9	--	27.2
Struck by object	23.9	--	99.1	45.6	33.6	35.1	16.7	15.6	--	12.8
Struck against object	14.3	--	17.9	23.5	18.7	16.5	42.4	6.1	--	6.8
Caught in equipment or object	9.9	--	77.5	28.9	18.3	5.7	--	3.2	--	5.3
Fall to lower level	18.8	183.1	22.4	72.1	15.8	39.2	15.4	9.4	--	6.2
Fall to same level	23.3	--	9.5	43.5	27.0	14.5	--	33.4	--	19.3
Slips, trips, loss of balance--without fall	5.3	--	--	11.7	6.8	--	14.2	2.6	--	3.7
Overexertion	60.5	--	132.1	74.1	50.4	70.1	67.2	35.7	--	83.3
Overexertion in lifting	36.4	--	75.1	21.7	22.6	41.7	29.3	24.7	--	61.8
Repetitive motion	13.2	--	--	--	33.7	6.5	21.4	3.6	--	3.5
Exposure to harmful substances	8.0	--	14.2	20.1	12.7	9.1	--	--	--	8.7
Transportation accidents	5.2	--	38.2	19.0	3.7	10.4	--	3.0	--	4.3
Fires and explosions	--	--	--	--	--	--	--	--	--	--
Assaults and violent acts by person	6.0	--	--	--	--	--	--	--	--	22.5

<sup>1</sup> Incidence rates represent the number of injuries and illnesses per 10,000 full-time workers and were calculated as: (N/EH) x 20,000,000 where

N = number of injuries and illnesses  
 EH = total hours worked by all employees during calendar year  
 20,000,000 = base for 10,000 equivalent full-time workers (working 40 hours per week, 50 weeks per year).

<sup>2</sup> Days away from work cases include those which result in days away from work with or without restricted work activity.

<sup>3</sup> Excludes farms with fewer than 11 employees.

<sup>4</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

**Table 7. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected worker characteristics and number of days away from work, 1997**

Kansas—private industry									
Characteristic	Total cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Total [18,547 cases]	100.0	16.6	16.3	18.4	13.1	11.9	5.8	17.9	5
Sex:									
Men	100.0	16.5	16.3	17.8	11.4	13.8	4.8	19.5	5
Women	100.0	16.7	16.7	19.5	16.3	8.4	7.4	14.9	5
Age:									
14 to 15	--	--	--	--	--	--	--	--	--
16 to 19	100.0	21.5	22.9	16.9	16.0	12.4	1.6	8.8	4
20 to 24	100.0	19.8	14.6	25.6	12.3	9.6	4.1	13.9	4
25 to 34	100.0	17.6	20.7	19.0	13.6	9.1	8.1	11.9	4
35 to 44	100.0	13.9	15.1	17.5	12.1	14.7	5.1	21.5	7
45 to 54	100.0	18.9	15.7	16.8	12.1	8.7	5.9	22.0	5
55 to 64	100.0	14.4	7.8	15.1	14.4	17.8	5.4	25.2	10
65 and over	100.0	0.3	6.3	8.4	19.9	26.4	1.4	37.4	14
Occupation:									
Managerial and professional specialty	100.0	19.6	17.2	32.6	9.0	13.9	1.9	5.9	3
Technical, sales, and administrative support	100.0	14.4	26.8	13.0	10.2	9.8	5.0	20.8	4
Service	100.0	18.5	19.9	17.0	16.9	7.8	5.3	14.5	4
Farming, forestry, and fishing	100.0	15.0	7.6	37.1	14.2	9.8	0.6	15.7	4
Precision production, craft, and repair	100.0	11.3	16.1	18.5	13.5	14.0	5.6	21.1	7
Operators, fabricators, and laborers	100.0	18.3	12.9	17.8	12.3	13.2	7.0	18.6	6
Length of service with employer:									
Less than 3 months	100.0	18.6	15.0	22.5	11.8	8.3	12.0	11.7	4
3 to 11 months	100.0	17.8	22.2	18.2	13.9	8.4	4.0	15.5	4
1 to 5 years	100.0	15.6	16.3	17.7	11.4	13.4	5.0	20.5	6
More than 5 years	100.0	14.9	14.2	11.7	16.3	15.4	4.6	22.8	8
Race or ethnic origin:									
White, non-Hispanic	100.0	15.3	14.8	19.6	13.2	12.0	5.4	19.5	6
Black, non-Hispanic	100.0	12.4	29.1	16.7	8.4	9.3	12.1	12.2	4
Hispanic	100.0	14.4	13.4	14.1	17.5	9.4	10.6	20.6	9
Asian or Pacific Islander	100.0	61.7	6.9	7.4	11.6	6.0	--	6.5	1
American Indian or Alaskan Native	100.0	3.0	19.1	22.5	55.3	--	--	--	8

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

**Table 8. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected occupations and number of days away from work, 1997**

Kansas—private industry									
Occupation	Total cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Total [18,547 cases]	100.0	16.6	16.3	18.4	13.1	11.9	5.8	17.9	5
Nursing aides, orderlies, and attendants	100.0	7.5	10.9	27.0	17.3	8.7	4.5	24.1	7
Truck drivers	100.0	5.4	2.3	16.6	8.9	29.6	18.0	19.2	14
Laborers, nonconstruction	100.0	28.7	15.3	12.5	16.7	7.9	7.0	11.9	4
Construction laborers	100.0	15.4	8.7	22.7	10.7	12.9	6.0	23.7	8
Assemblers	100.0	21.4	23.2	9.7	17.2	5.2	2.8	20.6	3
Janitors and cleaners	100.0	14.6	10.2	17.9	19.5	12.4	10.0	15.5	10
Carpenters	100.0	3.8	27.7	14.2	15.0	26.7	1.8	10.7	7
Cooks	100.0	34.6	38.5	3.8	0.8	9.1	7.1	6.1	2
Stock handlers and baggers	100.0	25.5	2.3	28.8	2.7	18.0	5.5	17.1	4
Welders and cutters	100.0	20.7	28.0	24.4	5.9	6.0	5.1	9.9	3
Registered nurses	100.0	10.2	26.2	38.0	3.0	17.5	3.5	1.6	3
Kitchen workers, food preparation	100.0	45.1	47.9	--	--	7.0	--	--	2
Farm workers	100.0	4.0	12.0	40.0	20.0	16.0	--	8.0	5
Butchers and meat cutters	100.0	12.9	26.8	26.0	3.8	12.4	5.0	13.1	3
Sales workers, other commodities	100.0	25.1	8.9	19.3	9.7	9.3	1.7	25.9	5
Machinists	100.0	17.1	22.5	26.7	12.3	9.9	2.1	9.4	3
Licensed practical nurses	100.0	7.6	10.2	12.2	2.3	18.3	2.1	47.3	14
Miscellaneous food preparation occupations	100.0	6.7	16.1	--	72.3	2.2	--	2.6	7
Precision assemblers, metal	100.0	9.0	16.8	5.9	9.5	25.8	9.3	23.7	13
Bank tellers	100.0	--	96.2	--	--	--	--	3.8	2
Automobile mechanics	100.0	1.5	40.4	31.5	13.5	4.3	--	8.7	5
Driver-sales workers	100.0	7.5	42.9	3.9	39.6	--	--	6.0	2
Traffic, shipping, and receiving clerks	100.0	8.1	15.1	11.5	2.3	23.5	--	39.4	14
Supervisors, production occupations	100.0	23.4	7.9	17.4	24.9	11.5	3.7	11.1	6
Bus, truck, and stationary engine mechanics	100.0	2.2	6.6	20.2	8.0	49.8	0.7	12.4	12
Maids and housemen	100.0	36.8	21.6	6.4	1.9	18.0	--	15.4	2
Plumbers, pipefitters, and steamfitters	100.0	8.8	13.1	22.7	3.6	8.6	3.6	39.6	12
Health aides, exc. nursing	100.0	7.5	5.4	26.3	39.0	--	18.0	3.9	6
Printing press operators	100.0	27.0	17.0	9.4	10.0	7.4	1.3	28.0	4
Groundskeepers and gardeners, exc. farm	100.0	54.2	3.5	16.3	11.9	3.2	2.4	8.7	1
Garage and service station related occupations	100.0	11.3	5.7	5.7	34.8	15.5	4.0	23.1	10

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

**Table 9. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected injury or illness characteristics and number of days away from work, 1997**

**Kansas—private industry**

Characteristic	Total cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Total [18,547 cases]	100.0	16.6	16.3	18.4	13.1	11.9	5.8	17.9	5
Nature of injury, illness:									
Sprains, strains	100.0	14.4	16.0	17.9	15.5	12.3	7.6	16.4	6
Bruises, contusions	100.0	21.6	19.0	28.3	12.2	8.5	3.1	7.3	3
Cuts, lacerations	100.0	32.6	27.8	19.1	11.7	2.7	2.0	4.1	2
Fractures	100.0	5.6	12.5	15.5	12.2	13.0	7.7	33.4	14
Heat burns	100.0	16.8	10.7	22.9	15.5	10.4	19.4	4.4	5
Carpal tunnel syndrome	100.0	1.4	19.8	11.6	13.6	9.0	7.0	37.5	15
Tendonitis	100.0	15.6	31.0	17.8	13.3	5.3	8.3	8.7	3
Chemical burns	100.0	14.6	15.5	31.0	--	13.4	9.1	16.5	4
Amputations	100.0	6.7	2.7	22.6	16.7	20.9	6.2	24.2	15
Multiple injuries	100.0	27.3	8.1	16.9	15.6	10.7	--	21.4	5
Part of body affected:									
Head	100.0	32.4	25.7	19.3	4.2	9.1	1.6	7.8	2
Eye	100.0	46.7	24.3	16.9	1.6	--	3.6	6.9	2
Neck	100.0	16.7	11.3	25.0	12.7	4.5	1.5	28.3	5
Trunk	100.0	11.9	14.8	19.8	18.1	13.5	4.7	17.1	7
Shoulder	100.0	8.7	10.6	19.0	15.7	17.8	8.7	19.5	9
Back	100.0	13.7	17.2	21.3	19.4	9.8	2.7	16.0	5
Upper extremities	100.0	18.4	20.1	19.7	11.7	8.1	3.7	18.3	4
Wrist	100.0	10.0	21.9	16.6	12.2	7.4	4.6	27.4	6
Hand, except finger	100.0	23.9	14.7	19.7	9.3	5.6	2.2	24.5	5
Finger	100.0	26.4	23.1	21.3	10.2	6.8	4.0	8.2	3
Lower extremities	100.0	14.8	13.0	14.5	9.7	13.4	12.6	21.9	8
Knee	100.0	5.2	9.2	13.2	7.3	16.4	19.1	29.5	20
Foot, except toe	100.0	20.0	21.5	18.0	2.9	21.6	5.2	10.8	3
Toe	100.0	16.8	25.2	35.7	12.3	3.9	1.4	4.6	3
Body systems	100.0	19.1	15.1	33.9	2.6	29.2	--	--	3
Multiple parts	100.0	21.8	10.1	16.4	13.1	14.6	2.9	21.2	7

See footnotes at end of table.



**Table 9. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by selected injury or illness characteristics and number of days away from work, 1997 -- Continued**

Kansas--private industry									
Characteristic	Total cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Source of injury, illness:									
Chemicals and chemical products	100.0	25.9	21.1	25.4	7.1	7.1	5.5	8.0	3
Containers	100.0	11.9	21.1	19.8	12.4	19.9	2.8	12.1	5
Furniture and fixtures	100.0	24.5	23.7	16.1	8.9	20.2	1.8	4.9	3
Machinery	100.0	24.4	19.4	11.6	11.8	10.8	5.8	16.3	3
Parts and materials	100.0	18.5	14.4	21.6	14.2	8.9	8.3	14.1	5
Worker motion or position	100.0	19.3	12.5	14.8	12.5	9.2	5.4	26.3	6
Floors, walkways, ground surfaces	100.0	9.9	17.7	15.9	15.6	14.2	3.9	22.8	8
Tools, instruments, and equipment	100.0	21.1	16.7	28.0	13.8	4.5	2.4	13.5	3
Vehicles	100.0	9.1	10.1	14.8	13.4	8.0	21.1	23.5	16
Health care patient	100.0	8.9	15.2	25.0	19.0	7.6	5.0	19.3	6
Event or exposure:									
Contact with objects and equipment	100.0	25.5	18.6	21.7	9.7	8.2	3.0	13.2	3
Struck by object	100.0	24.8	16.0	26.0	6.9	11.4	4.0	10.9	3
Struck against object	100.0	30.9	28.0	20.4	7.5	5.0	1.4	6.8	2
Caught in equipment or object	100.0	12.9	9.6	16.0	17.9	9.2	4.8	29.6	9
Fall to lower level	100.0	8.5	8.9	11.7	15.1	13.5	14.7	27.6	17
Fall to same level	100.0	10.7	21.6	17.7	12.9	13.7	6.2	17.1	5
Slips, trips, loss of balance--without fall	100.0	31.8	6.4	9.4	9.4	9.7	3.2	30.1	6
Overexertion	100.0	10.8	16.3	17.6	17.4	16.0	5.3	16.6	7
Overexertion in lifting	100.0	11.5	19.9	17.9	16.0	12.7	5.5	16.5	6
Repetitive motion	100.0	9.5	18.2	13.0	14.8	7.7	5.2	31.6	8
Exposure to harmful substances	100.0	32.9	24.0	15.9	7.7	7.3	7.0	5.4	2
Transportation accidents	100.0	12.0	7.1	17.4	11.9	14.1	7.5	30.0	14
Fires and explosions	100.0	--	15.0	39.3	--	26.4	19.4	--	5
Assaults and violent acts by person	100.0	15.5	18.1	43.4	11.7	1.4	4.6	5.3	4

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

Table 10. Percent distribution of nonfatal occupational injuries and illnesses involving days away from work<sup>1</sup> by industry division and number of days away from work, 1997

Kansas--private industry									
Characteristic	Total cases	Percent of cases involving							Median days away from work
		1 day	2 days	3 to 5 days	6 to 10 days	11 to 20 days	21 to 30 days	31 days or more	
Private industry <sup>2</sup> [18,547 cases]	100.0	16.6	16.3	18.4	13.1	11.9	5.8	17.9	5
Goods producing:									
Agriculture, forestry, and fishing <sup>2</sup>	100.0	12.5	7.6	38.1	13.7	9.7	2.8	15.7	4
Mining <sup>3</sup>	100.0	14.3	8.1	20.2	10.6	9.3	6.6	31.0	9
Construction	100.0	10.4	15.2	18.7	11.1	10.7	4.5	29.4	7
Manufacturing	100.0	21.3	15.0	15.9	13.1	12.9	4.6	17.2	5
Durable goods	100.0	22.1	14.8	16.3	14.8	11.1	4.0	16.9	4
Nondurable goods	100.0	20.2	15.3	15.5	10.9	15.2	5.3	17.6	5
Service producing:									
Transportation and public utilities <sup>3</sup>	100.0	11.7	6.3	19.0	8.3	16.8	17.3	20.6	12
Wholesale trade	100.0	18.1	24.9	9.9	12.5	21.9	3.3	9.4	4
Retail trade	100.0	25.8	18.8	17.0	13.6	8.4	3.9	12.5	4
Finance, insurance, and real estate	--	--	--	--	--	--	--	--	--
Services	100.0	11.9	16.8	23.1	16.7	7.9	6.0	17.5	5

<sup>1</sup> Days-away-from-work cases include those which result in days away from work with or without restricted work activity.

<sup>2</sup> Excludes farms with fewer than 11 employees.

<sup>3</sup> Data conforming to OSHA definitions for mining operators in coal, metal, and nonmetal mining and for employers in railroad transportation are provided to BLS by the Mine Safety and Health Administration, U.S. Department of Labor; and the Federal Railroad Administration, U.S. Department of Transportation. Independent mining contractors are excluded from the coal, metal, and nonmetal industries.

NOTE: Dashes indicate data that are not available. Because of rounding and data exclusion of nonclassifiable responses, data may not sum to the totals.

SOURCE: Bureau of Labor Statistics, U. S. Department of Labor, Survey of Occupational Injuries and Illnesses in cooperation with participating State agencies.

## **Appendices**

## Appendix A

### SCOPE OF THE SURVEY AND TECHNICAL NOTES

#### **Scope of the Survey**

The occupational injury and illness data reported through the annual survey are based on records which employers in the following industries maintain under the Occupational Safety and Health Act: agriculture, forestry, and fishing (SIC 01-09); oil and gas extraction (SIC 13); construction (SIC 15-17); manufacturing (SIC 20-39); transportation and public utilities (SIC 41-49); wholesale and retail trade (SIC 50-59); finance, insurance, and real estate (SIC 60-67); and services (SIC 70-89). Excluded from the survey are self-employed individuals; private households; farmers with fewer than 11 employees; employers regulated by other federal safety and health laws; and federal, state, and local government agencies.

Data conforming to OSHA definitions of recordable occupational injuries and illnesses for coal and lignite mining (SIC 11 and 12), metal and nonmetal mining (SIC 10 and 14), and railroads (SIC 40) are provided by the Mine Safety and Health Administration, U.S. Department of Labor, and by the Federal Railroad Administration, U.S. Department of Transportation.

Survey questionnaires were mailed to 3,652 sample units within the state. Approximately twelve percent of these were excluded from the final tabulation because they were no longer in operation, were not within the scope of the survey, were included in the report for another location, received duplicate survey forms for the same location, or were not mailable because of an inadequate address. Follow-up mailings and telephone calls to nonrespondents resulted in an overall usable response rate of 88 percent.

#### **Survey Questionnaire**

The survey questionnaire requested information concerning the average employment during the calendar year; total hours worked; the number of occupational illnesses by type (seven categories); the total occupational injuries and illnesses by type, i.e., fatalities, and nonfatal cases with and without lost workdays; the number of days away from work and days of restricted work activity; and case and demographic data for lost workday cases. See Appendix D for a sample of the survey form and instructions.

Federal grant arrangements specify that the respondent fill out a single report form. The data are then used to develop both state and national estimates. This elimination of duplicate reporting by respondents, in conjunction with the use of identical statistical techniques at the state and national levels, ensures maximum comparability of estimates.

## **Sample Design**

The basic sample was selected by the Bureau of Labor Statistics to represent all non-government industries in Kansas and to produce estimates of the number of occurrences and incidence rates of occupational injuries and illnesses for the state. The universe was stratified into industries according to the 1987 edition of the Standard Industrial Classification Manual published by the Office of Management and Budget.

A sample size necessary to produce a certain level of precision in the estimates of incidence rates was then determined for each industry. Previous surveys conducted by the U.S. Department of Labor, Bureau of Labor Statistics, have given an indication of the variability of incidence rates within certain groups of industries. Using these measures of variability, the number of establishments in the industry, and the employment in large establishments, a sample size was then calculated for each industry. The number of employees in large establishments was used as a control on the sample size. When industries are dominated by a few large establishments, smaller samples are required if the large establishments are included in the sample with certainty. Industries with higher expected incidence rates displayed more variability and, therefore, were allotted a proportionately larger sample than industries with lower rates.

Within an industry it was known that the number of injuries and illnesses an establishment experiences will vary with the employment of the establishment. Because of this, the universe of establishments within an industry was stratified by employment and then an optimum allocation was achieved by distributing the sample to each size group proportionate to the total employment in the size group. This procedure assumes that the variance of the average number of injuries and illnesses per establishment in a size group is proportionate to the average establishment employment size group. Sample sizes were then adjusted to produce integral sampling ratios.

## **Estimating Procedures**

By using a weighting procedure, units in the sample are made to represent all units in their size class for a particular industry. The inverse of the sampling ratio for the industry/employment-size class from which the unit was selected determines the weight. Weights of responding employers in a sampling cell are adjusted for the small proportion of survey forms not returned. Respondents are then shifted into the estimating cell determined by the employment and business activity report. Data for each unit are multiplied by the appropriate weight and nonresponse adjustment factor. The products are then aggregated to obtain a total for the estimating cell.

Since the universe file which provides the sample frame is not current to the reference year of the survey, data are adjusted to reflect current employment levels. In the annual survey, all estimates of totals are adjusted by the benchmark factor at the estimating cell level. The benchmarking procedure requires a source of accurate employment data which can be converted into annual average employment figures for separate estimates at the cell level.

**Federal-State Cooperation**

To eliminate duplicate reporting by respondents and ensure maximum comparability of estimates, survey respondents complete a single report form for national and state estimates.

**Industrial Classification**

Reporting units are classified into industries by their principal product or activity. The data are tabulated according to the 1987 edition of the Standard Industrial Classification Manual.

## Appendix B

**INSTRUCTIONS FOR COMPUTING INCIDENCE RATES FOR AN INDIVIDUAL FIRM**

Incidence rates for an individual establishment or firm may be calculated by employers by using the same formula that is used to calculate industry-wide incidence rates from the annual occupational injury and illness survey. Employers may then compare their work injury and illness rates to state and national rates for their industry.

The formula requires: (1) the number of injuries and illnesses, and (2) the number of hours actually worked by all employees during the reference period. To produce an overall incidence rate proceed by determining the following:

- The number of recordable occupational injuries and illnesses. This may be done by adding the totals for columns 1, 2, 6, 8, 9, and 13 of The Occupational Injuries and Illnesses Log (OSHA NO. 200).
- The total number of hours actually worked during the year by all employees from payroll or other time records. The hours worked figure should not include any nonwork time even though paid, such as vacations, sick leave, holidays, etc. (If actual hours worked are not available for employees paid on commission, by salary, by the mile, etc., hours worked may be estimated on the basis of scheduled hours or eight hours per workday.)

The formula for computing the incidence rate is as follows:

$$(1) \quad \frac{\text{Number of injuries and illnesses} \times 200,000}{(2) \quad \text{Employee hours worked}} = \text{Incidence Rate}$$

This rate represents the number of injuries and illnesses occurring per 200,000 hours of work exposure, or the rate per 100 full-time equivalent workers. The same base is used in computing the occupational injury and illness rates for Kansas and the nation.

An employer may compute rates for injuries, illnesses, lost workday cases, nonfatal cases without lost workdays, or the number of lost workdays. Simply replace the number of injuries and illnesses, (1) in the formula, with the measure for which the rate is being computed.

It is also possible to compute rates on a monthly, quarterly, or semi-annual basis, or even by department or any other grouping of employees. The formula remains the same except the constant now would be 16,667 for a monthly calculation, 50,000 for a quarterly calculation, or 100,000 for a semi-annual calculation. The number of cases or days in the numerator and the hours worked in the denominator would be for the same time frame as the constant.

## Appendix C

## GLOSSARY

**Average Employment:** The average number of full- and part-time employees who worked during the report period. This includes all classes of employees (e.g., administrative, seasonal, temporary, supervisory, clerical, professional, technical, sales, delivery, installation, construction, service personnel, as well as operating and related workers).

**Establishment:** A single physical location where business is conducted or where services or industrial operations are performed (e.g., factory, mill, store, hotel, restaurant, movie theater, farm, ranch, bank, sales office, warehouse, or central administrative office). For firms engaged in activities which may be physically dispersed such as construction, transportation, communication, and electric, gas, and sanitary services, records may be maintained at the place to which employees normally report each day. For personnel who do not primarily report or work at a single establishment, such as traveling salesmen, technicians, engineers, their establishment would be at the location from which they are paid or the base from which these personnel operate to carry out their activities.

**First Aid Treatment:** One-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and so forth, which do not ordinarily require medical care.

**Hours Worked:** Total hours worked by all employees. Includes all time on duty, but excludes vacation, holiday, sick leave, and all other nonwork time even though paid.

**Incidence Rate:** Number of injuries and/or illnesses, or lost workdays per 100 full-time workers. The rate is calculated as:

$$(N/EH) \times 200,000$$

where:	N	= number of injuries and/or illnesses, or lost workdays
	EH	= Total hours worked by all employees during the calendar year
	200,000	= base for 100 full-time equivalent workers (working 40 hours per week, 50 weeks per year)



**Lost Workday Cases:** Cases which involve days away from work or days of restricted activity, or both.

**Lost Workdays:** The number of workdays (consecutive or not), beyond the day of injury or onset of illness, the employee was away from work or limited to restricted work activity because of an occupational injury or illness.

- (2) Lost workdays, away from work: The number of workdays (consecutive or not) on which the employee would have worked but could not because of an occupational injury or illness.
- (3) Lost Workdays, restricted work activity: The number of workdays (consecutive or not) on which, because of an injury or illness the employee:
  - (a) was assigned to another job on a temporary basis,
  - (b) worked at a permanent job less than full-time
  - (c) worked at a permanently assigned job but could not perform all duties normally connected with it.

**Low-Hazard Industries:** Selected industries in retail trade; finance, insurance, and real estate; and services which are regularly exempt from OSHA recordkeeping. To be included in this exemption, an industry must fall within an SIC not targeted for general schedule inspections and must have an average lost workday case injury rate for a designated three-year measurement period at or below 75.0 percent of the U.S. private sector average rate.

**Medical Treatment:** Treatment (other than first aid) administered by a physician or registered professional personnel under the standing orders of a physician. Medical treatment does not include first aid treatment even though provided by a physician or registered professional personnel.

**Nonfatal Case Without Lost Workdays:** Any recordable occupational injury or illness case which does not involve a fatality or lost workdays.

**Occupational Illness:** Any abnormal condition or disorder, other than one resulting from an occupational injury, caused by exposure to environmental factors associated with employment.

**Occupational Injury:** Any injury such as a cut, fracture, sprain, amputation, etc., which results from a work accident or from an exposure involving a single incident in the work environment.

**Recordable Occupational Injuries and Illnesses:** Any case which may be categorized in one the following classes is recordable:

- (1) occupational deaths, regardless of the time between injury, or length of illness, and death;
- (2) occupational illnesses; or
- (3) occupational injuries which involve one or more of the following: loss of consciousness, restriction of work or motion, transfer to another job, or medical treatment (other than first aid).

**Standard Industrial Classification (SIC):** A classification system developed by the Office of Statistical Standards, Executive Office of the President/Office of Management and Budget, for use in the classification of establishments by type of activity in which engaged. Each establishment is assigned an industry code for its major activity which is determined by the product or group of products or services rendered. Establishments may be classified as 2-digit, 3-digit, or 4-digit industries, according to the degree of information available.

**Work Environment:** The physical location, equipment, materials processed or used, and the kinds of operations performed by an employee in the performance of his/her work, whether on or off the employer's premises.

## Appendix D

# Survey of Occupational Injuries and Illnesses, 1997



U.S. Department of Labor  
Bureau of Labor Statistics

Read our letter for important information

Please correct Your Company Address

**N**

We estimate that it will take an average of 1 hour to complete this survey (ranging from 30 minutes to 4 hours per package), including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing this information. If you have any comments regarding these estimates or any other aspect of this survey, including suggestions for reducing this burden, please send them to the Bureau of Labor Statistics, Occupational Safety and Health Statistics (1220-0045), 12 Massachusetts Avenue, N.E., Washington, DC 20212. Persons are not required to respond to the collection of information unless it displays a currently valid OMB control number. **DO NOT SEND THE COMPLETED FORM TO THIS ADDRESS.**

The Bureau of Labor Statistics and the State agency collecting this information will use the information you provide for statistical purposes only. To the full extent permitted by law, this information will be held in confidence and will not be disclosed without the written consent of your establishment.

OMB No. 1220-0045  
Approval expires 09-30-00  
BLS-9300 N06

## Part 1: Summary of 1997 Occupational Injuries and Illnesses

All establishments must complete this part of the survey, even if there were no occupational injuries and illnesses during 1997. This form tells us about the number of employees in your establishment and the number of hours they worked. It also gives us a summary of any occupational injuries and illnesses that did occur during 1997.

If you have already provided the **Occupational Safety and Health Administration (OSHA)** with this information, you may attach a copy of their form instead of completing Part 1. If you choose to attach the OSHA form, go to *What's Next*.

To answer the questions below, you'll need

- information about employment and hours worked from your payroll, and
- your completed copy of the 1997 *Log and Summary of Occupational Injuries and Illnesses* (OSHA No. 200).

### Tell us about your establishment's employees and the hours they worked

Be sure the information you supply refers **only** to the establishment(s) noted on the cover under *Reporting Site*.

1. What is the average number of employees who worked for your establishment during 1997?

If this number isn't available, you can estimate it this way:

Employment average

- Add together the number of employees your establishment paid in every pay period during 1997. Include all employees: full-time, part-time, temporary, seasonal, salaried, and hourly.
- Divide that answer by the number of pay periods your establishment had in 1997. Be sure to include any pay periods when you had no employees.
- Round the answer to the next highest whole number. Write the rounded number in the blank marked *Employment average*.

#### Example

Acme Construction pays its employees 26 times each year. During 1997,

in this pay period	Acme paid this many employees
1 .....	10
2 .....	0
3 .....	15
4 .....	30
5 .....	40
↓	↓
24 .....	20
25 .....	15
26 .....	10
	<u>830</u> (sum)

Because Acme has 26 pay periods, it would divide its sum by 26.

$$830 \text{ divided by } 26 = 31.92$$

Acme would round 31.92 to 32 and write that number in the blank marked *Employment average*.

2. How many hours did your employees (salaried as well as hourly employees) actually work during 1997?

Do not include vacation, sick leave, holidays, or any other non-work time, even if employees were paid for it. If your establishment keeps records of only the hours paid or if you have employees who are not paid by the hour, please estimate the hours that the employees actually worked.

If this number isn't available, you can use this worksheet to estimate it.

Total hours worked

#### Optional Worksheet

- \_\_\_\_\_ Find the number of full-time employees in your establishment for 1997.
- x \_\_\_\_\_ Multiply by the number of work hours for a full-time employee in a year.
- \_\_\_\_\_ This is the number of full-time hours worked.
- + \_\_\_\_\_ Add the number of any overtime hours as well as the hours worked by other employees (part-time, temporary, seasonal).
- \_\_\_\_\_ Round the answer to the next highest whole number. Write the rounded number in the blank marked *Total hours worked*.

3. Put an X in the box next to all the conditions that might have affected your answers to #1 and #2.

- |   |   |
|---|---|
| <input type="checkbox"/> Nothing unusual happened | <input type="checkbox"/> Natural disaster or adverse weather conditions         |
| <input type="checkbox"/> Strike or lockout        | <input type="checkbox"/> Shorter work schedules or fewer pay periods than usual |
| <input type="checkbox"/> Shutdown or layoff       | <input type="checkbox"/> Longer work schedules or more pay periods than usual   |
| <input type="checkbox"/> Seasonal work            | <input type="checkbox"/> Other reason: _____                                    |

4. Did you have ANY occupational injuries or illnesses during 1997?

- ☐ Yes. Go to the next section, *Tell us about the injuries and illnesses during 1997*.
- ☐ No. Go to *Sign This Form* on the back cover.

## Tell us about the injuries and illnesses during 1997

If you had occupational injuries or illnesses during 1997, follow these steps.

- ① Go to your completed 1997 *Log and Summary of Occupational Injuries and Illnesses* (OSHA No. 200) form.
- ② Look at the total line on the last page.
- ③ Copy the 1997 totals from your OSHA No. 200 form into the columns below. If more than one establishment is noted on the front cover under *Reporting Site*, add together the total lines from all your OSHA No. 200 forms to get the 1997 totals for all establishments. Then copy those totals into the columns below.

### Total Injuries

Copy these totals from columns (1) – (6):

Deaths as a result of injury (column 1)	Injuries with days away from work, or restricted workdays or both (column 2)	Injuries with days away from work (column 3)	Total days away from work (column 4)	Total days of restricted work activity (column 5)	Injuries without lost workdays (column 6)
_____	_____	_____	_____	_____	_____

### Total Types of Illnesses

Copy these totals from columns (7a) – (7g):

Skin diseases or disorders (column 7a)	Dust diseases of the lungs (column 7b)	Respiratory conditions due to toxic agents (column 7c)	Poisoning (column 7d)	Disorders due to physical agents (column 7e)	Disorders associated with repeated trauma (column 7f)	Other occupational illnesses (column 7g)
_____	_____	_____	_____	_____	_____	_____

### Total Illnesses

Copy these totals from columns (8) – (13):

Deaths as a result of illness (column 8)	Illnesses with days away from work, or restricted workdays or both (column 9)	Illnesses with days away from work (column 10)	Total days away from work (column 11)	Total days of restricted work activity (column 12)	Illnesses without lost workdays (column 13)
_____	_____	_____	_____	_____	_____

## What's next

Look at the totals you copied into columns (3) and (10) above (look for the bold lines).

- ▶ If you had NO cases in both columns (3) and (10), you are finished with the survey. Go to *Sign This Form* on the back cover.
- ▶ If you HAD cases in either column (3) or column (10), go to **Part 2: Reporting Cases with Days Away from Work**.

## Case with Days Away from Work

Tell us about a 1997 occupational injury or illness **only** if it resulted in days away from work. To find out which cases you should report, read the instructions at the beginning of **Part 2: Reporting Cases with Days Away from Work**. We will keep all information that you give us confidential.

### Tell us about the case

Go to your completed OSHA No. 200 form. Copy the case information from that form into the columns below.

		Injury		Illness	
Date of injury or illness (column B)	Employee's last name, first initial (column C)	Days away from work (column 4)	Days of restricted work activity (column 5)	Days away from work (column 11)	Days of restricted work activity (column 12)
/ / 97 month day year					

If, as a result of the injury or illness, the employee did NOT return to work in any capacity in 1997, tell us why.

☐ Still recovering; approximate return date / / 1998  
month day year

☐ Other, **examples:** retired, resigned, permanently (total) disabled: \_\_\_\_\_

### Tell us about the employee

Please answer the questions below.

- Employee's approximate length of service at this establishment when the incident occurred (optional)
  - ☐ Less than 3 months
  - ☐ From 3 to 11 months
  - ☐ From 1 to 5 years
  - ☐ More than 5 years

- Employee's race or ethnic background (optional)

- ☐ White, not of Hispanic origin
- ☐ Black, not of Hispanic origin
- ☐ Hispanic
- ☐ Asian or Pacific Islander
- ☐ American Indian, Aleut, or Eskimo

You may either answer the next questions or attach a copy of a supplementary document that answers them.

- Employee's age \_\_\_\_\_ OR date of birth / /  
month day year

- Employee's sex

- ☐ Male
- ☐ Female

- Employee's occupation \_\_\_\_\_  
Be specific and describe the occupation. Do not use a general term such as "maintenance". **Examples:** "auto mechanic"; "janitor."

### Tell us about the incident

Answer the questions below or attach a copy of a supplementary document that answers them.

- What was the employee doing just before the incident occurred? Tell us about the activity as well as the tools, equipment, or material the employee was using. Be specific. **Examples:** "climbing a ladder while carrying roofing materials"; "spraying chlorine from hand sprayer"; "daily computer key-entry."
- What happened? Tell us how the injury or illness occurred. **Examples:** "When ladder slipped on wet floor, worker fell 20 feet"; "Worker was sprayed with chlorine when gasket broke during replacement"; "Worker developed soreness in wrist over time."
- What was the injury or illness? Tell us the part of the body that was affected and how it was affected; be more specific than "hurt," "pain," or "sore." **Examples:** "strained back"; "chemical burn, hand"; "tendinitis, elbow"; "carpal tunnel syndrome."
- What object or substance directly harmed the employee? **Examples:** "concrete floor"; "chlorine"; "radial arm saw." If this question does not apply to the incident, leave it blank.

N	P	S	E	SS	OCC
---	---	---	---	----	-----

## Sign This Form

Fill in the name, title, and phone number of the person we should call with questions about the survey. Then date and sign the form.

	(       )		
<i>Printed name</i>	<i>Telephone number</i>	<i>Ext.</i>	<i>Today's date</i>
<i>Title</i>	<i>Signature</i>		

Use the return envelope to send us the **entire package** — everything that we sent you — within 30 days of the date your establishment received it. If the return envelope is missing, send the **entire package** to the return address on the front cover (look for *Address for Return Envelope*).

## If You Need Help . . .

If you have any questions or if you need help completing the survey, call the phone number that is listed below for your State. The phone number may be for an office outside of your State, but they will be able to help you. If you prefer to write, send your letter to the return address on the front of this package.

### A - H

**Alabama** (334) 242-3460  
**Alaska** (907) 465-6034  
**Arizona** (602) 542-3739  
**Arkansas** (501) 682-4542  
**California** (415) 972-8641  
**Colorado** (816) 426-4599  
**Connecticut** (860) 566-4380  
**Delaware** (302) 761-8223, 8221  
**District of Columbia**  
 (215) 596-1162  
**Florida** (850) 922-8953 or  
 (800) 219-8953 in FL  
**Georgia** (404) 656-2966  
**Guam** (671) 475-0168  
**Hawaii** (808) 586-9001

### I - M

**Idaho** (415) 975-4473  
**Illinois** (312) 353-7253  
**Indiana** (317) 232-2682  
**Iowa** (515) 281-3661  
**Kansas** (785) 296-5642  
**Kentucky** (502) 564-3070  
 ext. 276, 277, 279  
**Louisiana** (504) 342-3126  
**Maine** (207) 624-6444  
**Maryland** (410) 767-2373  
**Massachusetts** (617) 727-3593  
**Michigan** (517) 322-1848  
**Minnesota** (612) 297-7428  
**Mississippi** (404) 562-2518  
**Missouri** (573) 751-2663  
**Montana** (800) 541-3904

### N - R

**Nebraska** (402) 471-3547  
**Nevada** (702) 687-3298  
**New Hampshire** (617) 565-2302  
**New Jersey** (609) 292-8999  
 (609) 633-0618 fax  
**New Mexico** (505) 827-4230  
**New York** (212) 352-6690  
**North Carolina** (919) 733-2758  
**North Dakota** (816) 426-4599  
**Ohio** (312) 353-7253  
**Oklahoma** (405) 528-1500 ext. 257  
**Oregon** (503) 378-8254  
**Pennsylvania** (215) 596-1162  
**Puerto Rico** (787) 754-5737,  
 -5343 or (787) 765-4687 fax  
**Rhode Island** (401) 277-3704

### S - W

**South Carolina** (803) 734-9653  
 or 734-9654  
**South Dakota** (816) 426-4599  
**Tennessee** (615) 741-1748  
**Texas** (512) 440-3852  
 (512) 707-5878 fax  
**Utah** (801) 530-6881, -6823  
 (801) 536-7906 fax  
**Vermont** (802) 828-5076  
**Virgin Islands**  
 (809) 776-3700 ext. 2040  
**Virginia** (804) 786-8011  
**Washington** (360) 902-5640  
**West Virginia** (215) 596-1162  
**Wisconsin** (800) 884-1273  
**Wyoming** (816) 426-4599

## Recordkeeping Summary

Basic recordkeeping concepts and guidelines are included with instructions on the back of form OSHA No. 200. The following summarizes the major recordkeeping concepts and provides additional information to aid in keeping records accurately.

### General concepts of recordability

1. An injury or illness is considered work related if it results from an event of exposure in the work environment. The work environment is primarily composed of: (1) The employer's premises, and (2) other locations where employees are engaged in work-related activities or are present as a condition of their employment. When an employee is off the employer's premises, work relationship must be established; when on the premises, this relationship is presumed. The employer's premises encompass the total establishment. This includes not only the primary facility, but also such areas as company storage facilities, cafeterias, and restrooms. In addition to physical locations, equipment or materials used in the course of an employee's work are also considered part of the employee's work environment.

2. All work-related fatalities are recordable.

3. All recognized or diagnosed work-related illnesses are recordable.

4. All work-related injuries requiring medical treatment or involving loss of consciousness, restriction of work or motion, or transfer to another job are recordable.

### Analysis of injuries

Recordable and nonrecordable injuries. Each case is distinguished by the treatment provided; i.e., if the injury was such that medical treatment was provided or should have been provided, it is recordable; if only first aid was required, it is not recordable. However, medical treatment is only one of several criteria for determining recordability. Regardless of treatment, if the injury involved loss of consciousness, restriction of work or motion, or transfer to another job, the injury is recordable.

Medical treatment. The following procedures are generally considered medical treatment. Injuries for which this type of treatment was provided or should have been provided are almost always recordable if the injury is work related:

- Treatment of **INFECTION**
- Application of **ANTISEPTICS** during second or subsequent visit to medical personnel
- Treatment of **SECOND OR THIRD DEGREE BURN(S)**
- Application of **SUTURES** (stitches)
- Application of **BUTTERFLY ADHESIVE DRESSING(S)** or **STERI STRIP(S)** in lieu of sutures
- Removal of **FOREIGN BODIES EMBEDDED IN EYE**
- Removal of **FOREIGN BODIES FROM WOUND**; if procedure is **COMPLICATED** because of depth of embedment, size, or location
- Use of **PRESCRIPTION MEDICATIONS** (except a single dose administered on first visit for minor injury or discomfort)
- Use of hot or cold **SOAKING THERAPY** during second or subsequent visit to medical personnel
- Application of hot or cold **COMPRESS(ES)** during second or subsequent visit to medical personnel
- **CUTTING AWAY DEAD SKIN** (surgical debridement)
- Application of **HEAT THERAPY** during second or subsequent visit to medical personnel
- Use of **WHIRLPOOL BATH THERAPY** during second or

- **POSITIVE X-RAY DIAGNOSIS** (fractures, broken bones, etc.)
- **ADMISSION TO A HOSPITAL** or equivalent medical facility **FOR TREATMENT**.

First aid treatment. The following procedures are generally considered first aid treatment (e.g., one-time treatment and subsequent observation of minor injuries) and should not be recorded if the work-related injury does not involve loss of consciousness, restriction of work or motion, or transfer to another job:

- Application of **ANTISEPTICS** during first visit to medical personnel
- Treatment of **FIRST DEGREE BURNS(S)**
- Application of **BANDAGES(S)** during first visit to medical personnel
- Use of **ELASTIC BANDAGES(S)** during first visit to medical personnel
- Removal of **FOREIGN BODIES NOT EMBEDDED IN EYE** if only irrigation is required
- Removal of **FOREIGN BODIES FROM WOUND**; if procedure is **UNCOMPLICATED**, and is, for example, by tweezers or other simple technique
- Use of **NONPRESCRIPTION MEDICATIONS AND** administration of single dose of **PRESCRIPTION MEDICATION** on first visit for minor injury or discomfort
- **SOAKING THERAPY** on initial visit to medical personnel or removal of bandages by **SOAKING**
- Application of hot or cold **COMPRESS(ES)** during first visit to medical personnel
- Application of **OINTMENTS** to abrasions to prevent drying or cracking
- Use of **WHIRLPOOL BATH THERAPY** during first visit to medical personnel
- **NEGATIVE X-RAY DIAGNOSIS**
- **OBSERVATION** of injury during visit to medical personnel.

The following procedure, by itself, is not considered medical treatment:

- Administration of **TETANUS SHOT(S)** or **BOOSTERS(S)**. However, these shots are often given in conjunction with more serious injuries; consequently, injuries requiring these shots may be recordable for other reasons.

Reminder: Work-related injuries requiring only first aid treatment and that do not involve any of the conditions in item 4 above, are not recordable.



This Report Was Prepared by:

Center for Health and Environmental Statistics  
Lorne A. Phillips, Ph.D., Director and State Registrar

Office of Health Care Information  
Elizabeth W. Saadi, Ph.D., Director

Author: Terri O'Brate

Desk Top Publishing Support: Julie Alderson

Editor: Charles Crevoiserat

Reviewers: Elizabeth Saadi, Ph.D., and Lorne A. Phillips, Ph.D.